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ARIZONA

1979 Vital Health Statistics

ARIZONA DEPARTMENT OF HEALTH SERVICES
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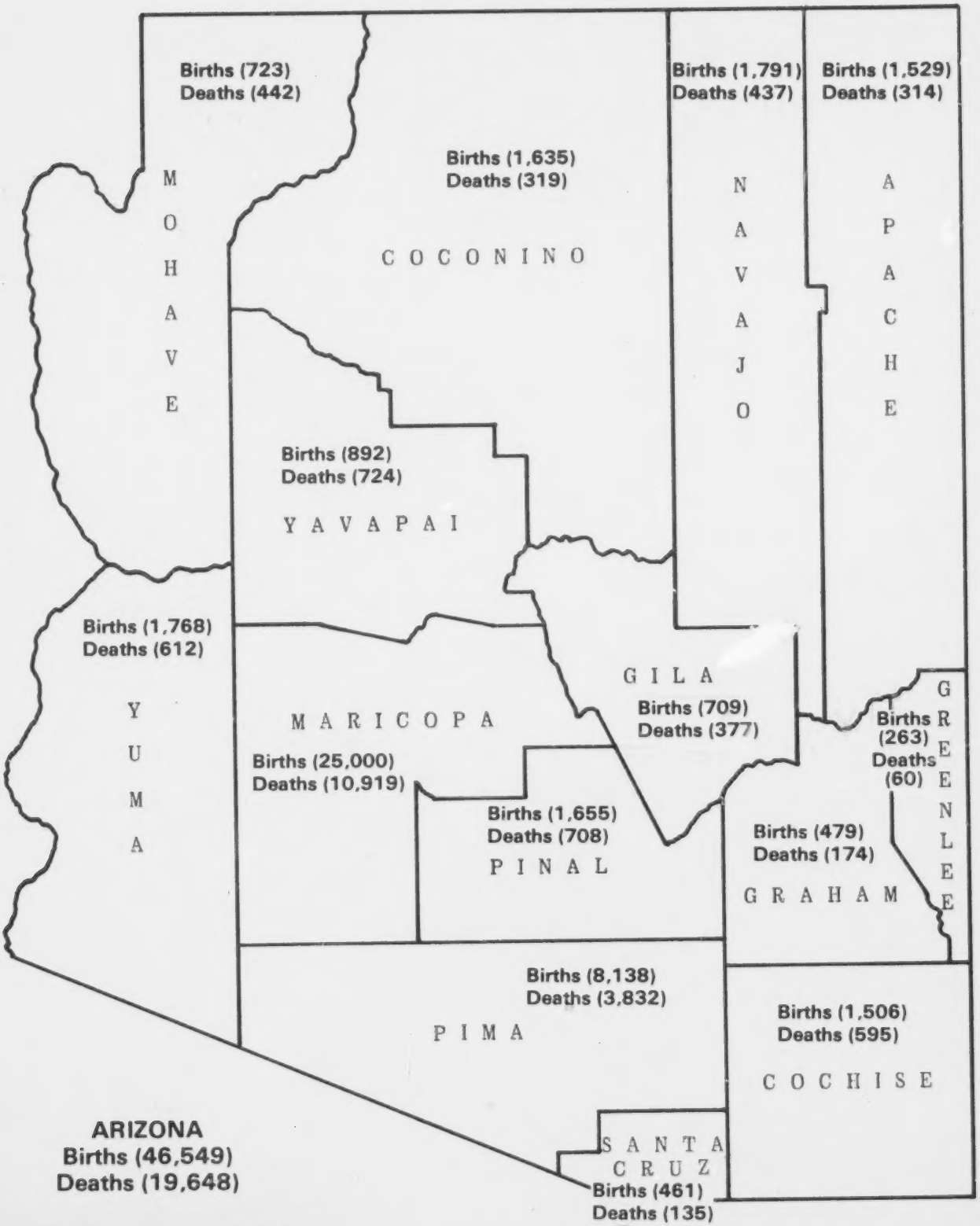
ARIZONA



ARIZONA
Births (46,549)
Deaths (19,648)

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1979 Arizona Vital Health Statistics

Bruce Babbitt, Governor
State of Arizona

James E. Sarn, M.D., M.P.H., Director
Arizona Department of Health Services

Preface

The 1979 edition of the *Arizona Vital Health Statistics Report* is a statistical summary of vital events for calendar year 1979. Data relating to population, births, deaths, fetal deaths, marriages, divorces and abortions are included. Although most of the data in this report pertain to events occurring in 1979, some data for prior years have been included to illustrate trends. Most of the data in this report refer to Arizona residents. Some events, however, such as marriages and divorces are tabulated to where the event occurred rather than the residence status of the party or parties involved.

As a certain number of Arizona residents either deliver babies or die out of state each year, it is necessary to include data obtained from the certificates of other states in any residence tabulations pertaining to Arizona residents. The report includes all such out-of-state certificates and all in-state certificates received prior to March 15, 1980. Although a few records for calendar year 1979 were received after these filing dates, their exclusion from this report is statistically insignificant.

The report is composed of the following sections and appendices: 1. Data Collection and Definitions; 2. Population Section; 3. Trends and Summary; 4. Natality Section; 5. Mortality Section; 6. Abortion Section; and 7. Marriage and Divorce Section.

Any comments or suggestions concerning the content and format of this report are welcome. Any additional needs for data or analyses should be directed to the Research and Statistical Analysis Section, Bureau of Vital Records and Information Services. The office will make every attempt to comply with requests for data within the limitation of staff and resources.

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Section I
Data Collection and Definitions

Sources of Data

Information of births, deaths and fetal deaths is compiled from the original documents filed in the Vital Records Section and from transcripts of original certificates filed in other states but affecting Arizona residents. (Copies of certificates for births and deaths occurring outside the United States are not sent to Arizona.)

This report includes all 1979 births and deaths for which records were received before March 15, 1980, but excludes certificates and transcripts received after that date. Because the number of 1979 vital events which are not included is small, the figures shown are relatively complete counts and are considered satisfactory as descriptive statistics.

Arizona presently has no central registry for marriage and divorce records. Annual statistics are limited to counts of such records furnished by the Clerk of the Superior Court in each county.

Population

Population estimates were prepared by the Department of Economic Security of Arizona. In the majority of cases, DES Report Number 12 was used.

Race/Color

In accordance with the practice of the United States Census Bureau, persons of Mexican origin are classified as "white." Starting in 1978, Yaqui Indians were no longer classified as white but as American Indian. The American Indian figures include those living both on and off the reservation.

Definitions

Birth Weight—Weight of fetus or infant at time of delivery.

Fetal Death—Death prior to the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy. The death is indicated by the fact that after such expulsion or extraction the fetus does not breathe or show any evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

First Birth—A live birth where the maternal medical history indicates there were no prior live births to the mother.

Gestational Period—Number of weeks elapsed between the first day of the last menstrual period and date of delivery.

Infant Death—Death occurring to an individual of less than one (1) year of age.

Live Birth—The complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

Live-Birth Order—Order number is equal to number of previous live births plus current birth.

Low-Weight Birth—Birth wherein the birth weight is equivalent to 2,500 grams or less (approximately 5 lbs., 8 ozs.).

Maternal Deaths—Those deaths wherein the physician has designated a maternal condition as the underlying cause of death.

Mean—The average of a set of values, equal to the sum of the values divided by the number of values.

Median—The central value of a distribution of values where in the same percentage of observations are above this point as are below.

Mode—The value which occurs most frequently in a set of values.

Neonatal Death—Deaths occurring to an individual of less than 28 days of age.

Occurrence—Place where the event actually occurred.

Perinatal Death—Fetal death or death under 28 days of age.

Race—Race for mother, father or decedent is as stated on certificate. Race of child is determined from race of the parents.

Residence—Usual place of residence for person to whom event occurred. For births and fetal deaths, residence is defined as the mother's usual place of residence.

Total Births—Total live births.

Underlying Cause of Death—That condition giving rise to the chain of events leading to death.

Rates

Age-Specific Death Rate—Number of deaths in specific age groups divided by total resident population in specific age group X 100,000

Age-Specific Death Rate by Cause of Death—Number of deaths in specific age group and from a specific cause divided by total resident population in specific age group X 100,000

Birth Rate—Number of resident live births divided by total resident population X 1,000

Cause-Specific Rate—Number of deaths due to a specific cause divided by total resident population X 100,000

Death Rate—Number of resident deaths divided by total resident population X 1,000

Divorce Rate—Number of Occurrences (divorces and annulments) divided by total resident population X 1,000

Fertility Rate—Number of resident live births divided by total female population (ages 15-44) x 1,000

Fetal Death Rate—Number of resident fetal deaths divided by total resident live births X 1,000

Infant Mortality Rate—Number of infant deaths divided by total resident live births X 1,000

Low-Weight Birth Rate—Number of low-weight births divided by total resident live births X 1,000

Marriage Rate—Number of persons married divided by total resident population X 1,000

Maternal Death Rate—Number of maternal deaths divided by total resident live births X 10,000

Neonatal Death Rate—Number of neonatal deaths divided by total resident live births X 1,000

Perinatal Death Rate—Number of perinatal deaths divided by total resident live births X 1,000

Unwed Birth Rate—Number of births to unwed mothers divided by total resident live births X 1,000

Reliability of Rates

Many of the rates shown in this report are based on a small population, a small number of events, or both. The rates based on small numbers may be questionable due to chance factors and should be used with caution. Rates for counties with small populations also may vary considerably from year to year. In addition, one must make allowances for differences in age distributions, etc., for which rates may not be adjusted. Consequently, caution must be taken in forming conclusions on the basis of various rates without taking additional factors into consideration.

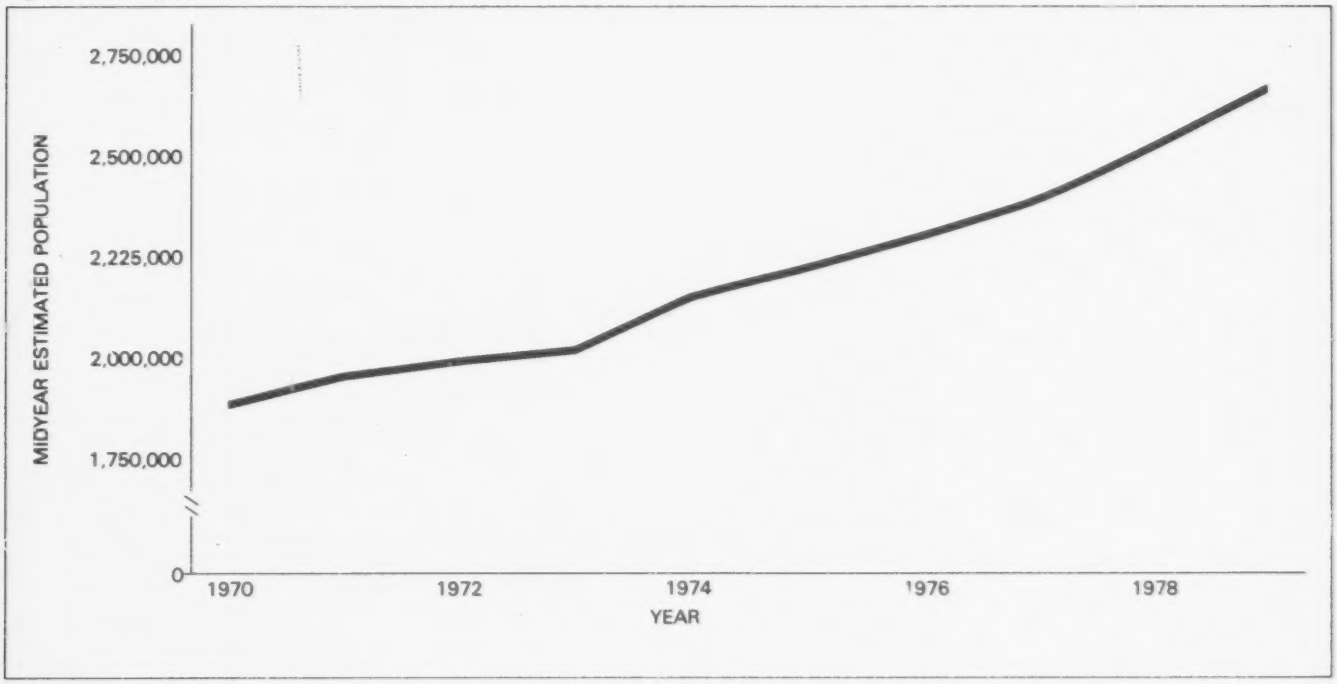
Section II
Population

Arizona Population Growth

County Population

Arizona continues to grow at a rapid pace. Yearly, migration is increasing as is the natural increase (births minus deaths) because of the continuing increase in live births. A preliminary population estimate of 2,631,000 for July 1, 1979 indicates that Arizona grew by 855,600 from the 1970 census count, an increase of 48.2 percent (Figure 2.1). This represents the largest increase for any state in the nation for the period April 1, 1970 to July 1, 1979.

Figure 2.1. Total population: Arizona, 1970-1979



The population of Maricopa County was estimated to be 1,453,500. As shown by table 2.1, this represents an increase of 49.7 percent from the 1970 census among Arizona's most populous county. The population of the second most populous county, Pima, reached an estimated 521,300, an increase of 48.2 percent from the 1970 census. The combined population of the two metropolitan areas reached 1,974,800 or 75.1 percent of the state's population compared with 1,322,900 or 74.5 percent at the 1970 census. Mohave County continued to lead as the county with the largest percentage gain (89.6 percent) since the 1970 census.

	1970	1979	PERCENTAGE INCREASE 1970-1979
ARIZONA	1,775,400	2,631,000	48.2
Apache	32,300	49,200	52.3
Cochise	61,900	82,300	33.0
Coconino	48,300	81,500	68.7
Gila	29,200	35,800	22.6
Graham	16,600	21,800	31.3
Greenlee	10,300	11,800	14.6
Maricopa	971,200	1,453,500	49.7
Mohave	25,900	49,100	89.6
Navajo	47,600	73,700	54.8
Pima	351,700	521,300	48.2
Pinal	68,600	91,500	33.4
Santa Cruz	14,000	19,600	40.0
Yavapai	37,000	61,700	66.8
Yuma	60,800	78,100	28.5

Table 2.1. Population by county and percentage increase: Arizona, 1970 and 1979

Coconino County was in second place with a gain of 68.7 percent while Yavapai County ranked third with a 66.8 percent increase. Greenlee County had the smallest gain in population with a 14.6 percent increase.

Race

The white population (exclusive of Spanish heritage) was estimated at 1,905,538 or 72.4 percent of the state's population (Figure 2.2). The population of Spanish heritage (482,195) representing 18.3 percent of Arizona's population when combined with the white population showed a total of 2,387,733 or 90.8 percent of the total population. The minority population represented by the nonwhite population numbered 243,267 or 9.2 percent of the state's population.

Age

Population for Arizona and its counties by age show that the age group 65 years of age and older (284,973 - 10.8 percent) maintained its lead as the group with the largest number of people. The age group 20-24 years with 271,183 people and 10.3 percent moved into second place while the age group 15-19 years with 259,872 people (9.9 percent) ranked third.

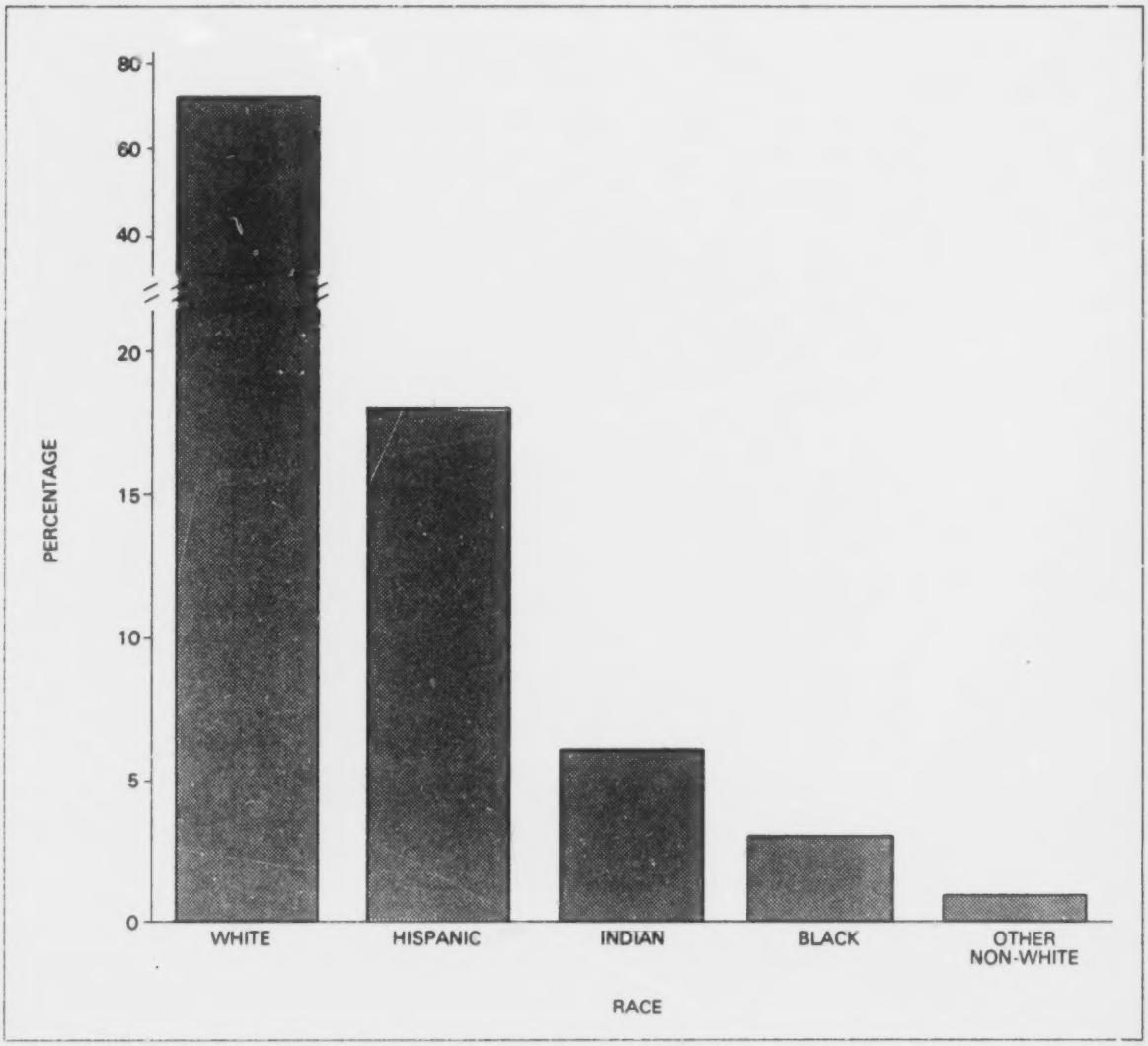


Figure 2.2. Percentage of population by race: Arizona, 1979

Section III
Summary

Births . . . Total births to Arizona residents increased by 8.1 percent between 1978 and 1979, to a new high of 46,549 births. The total number of births has more than doubled since 1950, when resident births numbered 20,510. Although the number of births have been increasing, these increases have not kept up with increases in the population. This has resulted in a declining birth rate. In 1950, Arizona's birth rate was 27.4 per 1,000 population, compared to the current birth rate of 17.7. The U.S. rate has similarly decreased from 23.6 in 1950 to 15.8 in 1979.

Births to Unwed Mothers . . . Over 17 percent of Arizona births in 1979 were to unwed mothers. The number and rate of births to unwed mothers were up from 1978, increasing from 7,044 (163.6 per 1,000 live births) to 8,097 (173.9 per 1,000 live births).

Deaths . . . Between 1912, the year Arizona became a state, and 1979, the number of deaths occurring to Arizona residents increased from 3,297 to 19,648. The 3,297 deaths recorded in 1912 was the lowest number of resident deaths in this century, while the 19,648 deaths in 1979 represented the highest. Although the total number of deaths increased between 1912 and 1979, the death rate decreased. The death rate in 1912 was 14.3 per 1,000 population while the rate in 1979 was 7.5.

Fetal Deaths . . The fetal death rate for Arizona, which related fetal death figures to live births, has been decreasing over the years in Arizona. In 1950, the fetal death rate was 18.6 per 1,000 live births as compared to 7.9 in 1979. As compared to National rates, Arizona's fetal death rate has generally been below national rates. In fact, the United States rate has been consistently higher than the Arizona rate since 1950.

Infant Deaths . . . Of the 19,648 deaths of Arizona residents in 1979, 635 deaths occurred to individuals under one year of age. The frequency of infant deaths in Arizona has decreased by 32 percent since 1950, when Arizona recorded 937 infant deaths. The infant death rate in Arizona has also shown a considerable decrease, declining from 45.7 per 1,000 live births in 1950 to 13.6 in 1979.

Nationally, the infant death rate has also shown a similar decrease falling from 29.2 in 1950 to 13.0 in 1978. This past year, while the U.S. rate decreased from 14.4 to 13.0, Arizona's infant death rate increased slightly from 13.1 to 13.6.

Maternal deaths . . . Since 1950, the maternal death rate in Arizona has progressively decreased. In 1950, the maternal death rate of 10.7 per 10,000 live births far exceeded the 1979 rate of 0.6. This trend parallels that of the nation, whose maternal death rate fell from 8.3 in 1950 to 0.9 (est) in 1979.

Abortions . . . There were 7,811 abortions recorded in 1978. The 1979 abortion rate in Arizona was 12.7 abortions per 1,000 women of reproductive age (15-44 years). Of these women, 31.9 percent were teenagers, 37.4 percent were 20 to 24 years and 28.6 percent were 25 years and older. Most women obtaining abortions in Arizona were unmarried (76.0 percent), childless (63.3 percent), and in the first trimester of pregnancy (91.5 percent).

Marriages . . . In 1979, marriages in Arizona rose by seven percent. In terms of rates, the rate increased only slightly from 11.2 to 11.3 per 1,000 population. Since 1950, the marriage rate in Arizona has been higher than that of the United States.

Divorces . . . Divorce rates in Arizona have been on the increase in past years. Since 1950, the divorce rate in Arizona increased from 5.4 divorces per 1,000 population to its current rate of 17.6. In this time period, Arizona's divorce rate has consistently been higher than the U.S. rate.

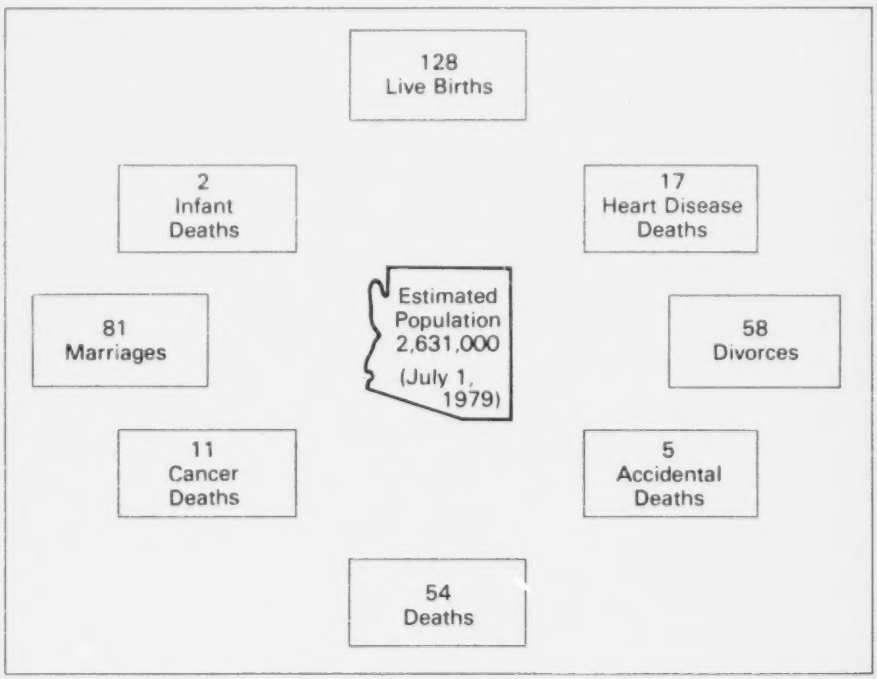


Figure 3.1. Daily average of vital events: Arizona residents, 1979

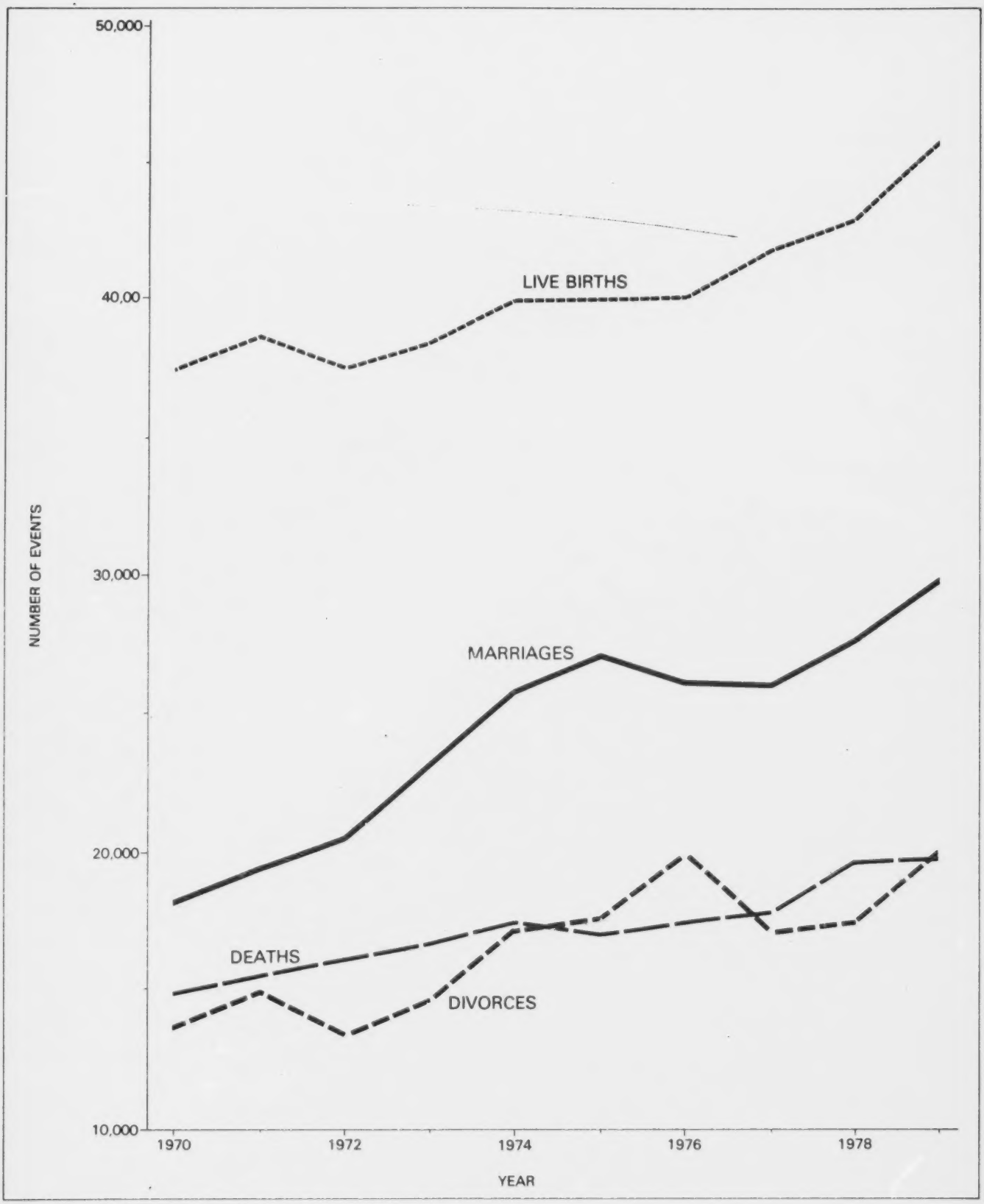


Figure 3.2. Total births, deaths, marriages and divorces: Arizona residents, 1970-1979

Table 3.1. Summary of vital events: Arizona residents, 1970-1979

	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
Live Births	46,549	43,058	41,827	40,028	39,543	39,906	38,025	37,501	38,521	37,591
Rate	17.7	17.4	17.8	17.6	17.8	18.5	18.3	19.1	20.6	21.2
Deaths	19,648	19,097	17,993	17,302	16,964	17,031	16,844	15,809	15,671	14,857
Rate	7.5	7.7	7.7	7.6	7.6	7.9	8.1	8.1	8.4	8.4
Fetal Deaths	368	311	356	362	351	380	373	406	425	385
Rate	7.9	7.2	8.5	9.0	8.9	9.5	9.8	10.8	11.0	10.2
Infant Deaths	635	564	559	614	587	594	585	628	710	670
Rate	13.6	13.1	13.4	15.3	14.8	14.9	15.4	16.7	18.4	17.8
Neonatal Deaths	415	389	364	415	381	395	373	410	456	468
Rate	8.9	9.0	8.7	10.4	9.6	9.9	9.8	10.9	11.8	12.4
Maternal Deaths	3	4	5	3	3	6	2	8	3	6
Rate	0.6	0.9	1.2	0.7	0.8	1.5	0.5	2.1	0.8	1.6
Marriages	29,603	27,725	26,534	26,558	27,038	26,180	23,318	20,865	19,069	18,012
Rate	11.3	11.2	11.5	11.7	11.9	12.6	12.6	11.9	11.2	10.8
Divorces	19,982	17,320	16,578	19,029	17,577	16,926	14,036	13,197	14,397	13,298
Rate	7.6	7.0	7.1	8.5	7.9	7.9	6.8	6.7	7.7	7.5

Table 3.2. Summary of vital events by county of residence: Arizona, 1979

COUNTY	ESTIMATED POPULATION	BIRTHS		DEATHS		MARRIAGES		DIVORCES	
		Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
ARIZONA	2,631,000	46,549	17.7	19,648	7.5	29,603	13.3	19,982	7.6
Apache	49,200	1,529	31.1	314	6.4	138	2.8	101	2.1
Cochise	82,300	1,506	18.3	595	7.2	969	11.8	708	8.6
Coconino	81,500	1,635	20.1	319	3.9	683	8.4	433	5.3
Gila	35,800	709	19.8	377	10.5	497	13.9	243	6.8
Graham	21,800	479	22.0	174	8.0	269	12.3	164	7.5
Greenlee	11,800	263	22.3	60	5.1	123	10.4	51	4.3
Maricopa	1,453,500	25,000	17.2	10,919	7.5	15,596	10.7	11,730	8.1
Mohave	49,100	723	14.7	442	9.0	377	7.7	443	9.0
Navajo	73,700	1,791	24.3	437	5.9	546	7.4	273	3.7
Pima	521,300	8,138	15.6	3,832	7.4	5,957	11.4	3,834	7.4
Pinal	91,500	1,655	18.1	708	7.7	917	10.0	643	7.0
Santa Cruz	19,600	461	23.5	135	6.9	324	16.5	113	5.8
Yavapai	61,700	892	14.5	724	11.7	522	8.5	466	7.6
Yuma	78,100	1,768	22.6	612	7.8	2,685	34.4	780	10.0

*Rate per 1,000 estimated population

COUNTY	FETAL DEATHS		NEONATAL DEATHS		PERINATAL DEATHS		INFANT DEATHS	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
ARIZONA	368	7.9	415	8.9	783	16.8	635	13.6
Apache	11	7.2	13	8.5	24	15.7	33	21.6
Cochise	10	6.6	18	12.0	28	18.6	25	16.6
Coconino	18	11.0	20	12.2	38	23.2	34	20.8
Gila	5	7.1	6	8.5	11	15.5	10	14.1
Graham	3	6.3	2	4.2	5	10.4	4	8.4
Greenlee	3	11.4	1	3.8	4	15.2	3	11.4
Maricopa	191	7.6	235	9.4	426	17.0	344	13.8
Mohave	3	4.1	5	6.9	8	11.1	8	11.1
Navajo	14	7.8	22	12.3	36	20.1	32	17.9
Pima	78	9.6	56	6.9	134	16.5	83	10.2
Pinal	4	2.4	14	8.5	18	10.9	23	13.9
Santa Cruz	4	8.7	2	4.3	6	13.0	4	8.7
Yavapai	10	11.2	6	6.7	16	17.9	11	12.3
Yuma	14	7.9	15	8.5	29	16.4	21	11.9

*Rate per 1,000 live births

Table 3.3. Summary of vital events by county of residence: Arizona, 1979

Section IV
Natality

Total Births

Between 1912 and 1979, the number of live births occurring each year has varied considerably. The smallest number of live births recorded in this period was 3,998. This occurred in 1912. The greatest number was 46,549 in 1979. Figure 4.1 portrays the number of live births for Arizona from 1912 through 1979. Since 1912, live births have increased steadily and appreciably. This is a 1,064 percent increase, an average of 16 percent annual increase.

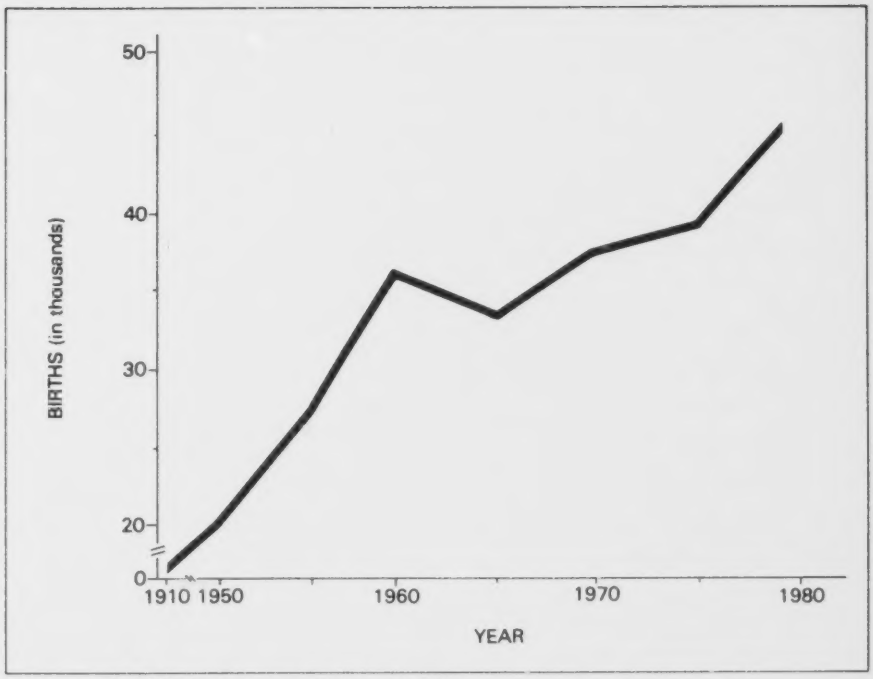
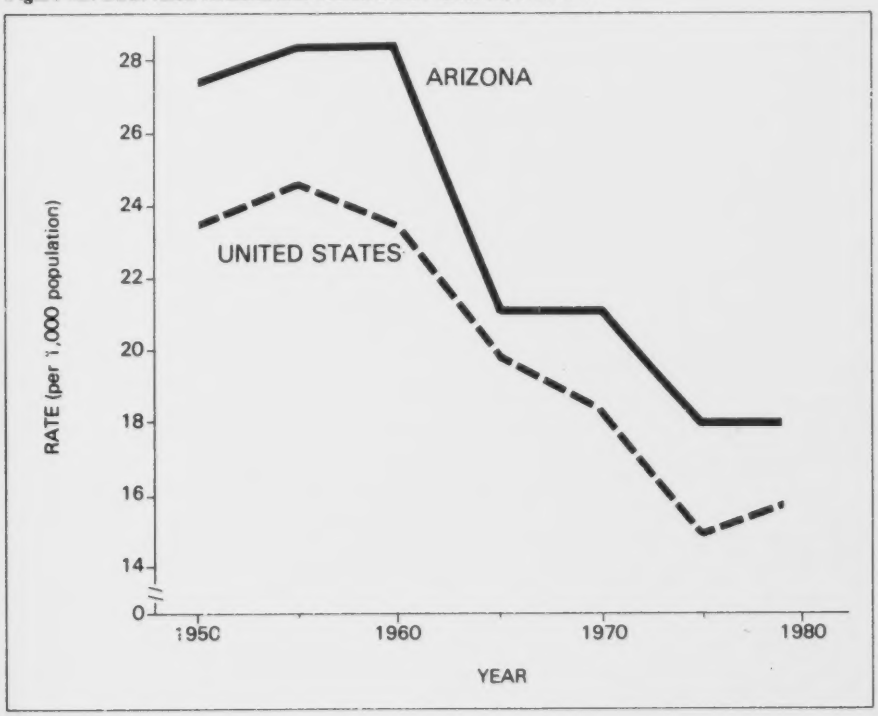


Figure 4.1. Total births: Arizona residents, 1950-1979

Birth and Fertility Rates

The birth rate in Arizona increased slightly from 17.4 per 1,000 population in 1978 to 17.7 in 1979. With the exception of some fluctuations, the birth rate has generally been decreasing since 1950. This decreasing birth rate has paralleled the national rate (Figure 4.2). Like the birth rate, the fertility rate also increased between 1978 and 1979, although the general trend has been a declining fertility rate. The fertility rate of 77.1 per 1,000 women aged 15 to 44 years in 1979 represented a 4.6 percent increase over the 1978 rate of 73.7. Among women of child bearing age, fertility rates varied by age group. As shown by table 4.1, the fertility rate increased as the mother's age increased to a high of 122.4 for women aged 20-24 years. The rate then decreased for the older age groups to a low of 0.5 for women aged 45 years and older.

Figure 4.2. Birth rates: Arizona and United States residents, 1950-1979



Residence

There were 46,549 births to Arizona residents in 1979. The number of births occurring in Arizona was 46,700. This discrepancy is explained by the fact that some Arizona residents gave birth outside the state, while some nonresidents delivered within the state. There were 596 births to Arizona residents outside Arizona and 747 nonresident births within the state. The largest proportion of nonresident births—almost 42 percent—were to residents of Mexico. Nearly 22 percent were to residents of California;

New Mexico ranked next with over 18 percent. The remainder were to residents of various other areas.

Nearly 54 percent of the births occurring in Arizona were in Maricopa County. The county with the smallest number of births was Greenlee - 263 births.

Race and Sex

In 1979, 84.7 percent of Arizona resident births were to white mothers. While only 15.3 percent of the births were to nonwhite mothers, the nonwhite fertility rate of 136.1 per 1,000 live births was 90.3 percent higher than the rate of 71.5 for white women. Table 4.2 provides the race and sex of newborns for each county. Of the 46,549 infants born in 1979, 51.5 percent were males. The highest proportion of male births were recorded by Asians with 53.9 percent, while American Indians recorded the lowest with 51.1 percent.

Table 4.1. Age-specific fertility rates: Arizona residents, 1979

AGE	LIVE BIRTHS	FEMALE POPULATION	FERTILITY RATE
TOTAL	46,549	603,500*	77.1
10-14	116	103,800	1.1
15-19	7,917	127,800	61.9
20-24	16,547	135,200	122.4
25-29	13,332	114,500	116.4
30-34	6,351	89,000	71.4
35-39	1,868	72,700	25.7
40-44	381	64,300	5.9
45-49	31	61,500	0.5
Not Stated	6	-	-

*Females age 15 to 44 years

RESIDENCE	WHITE		AMERICAN INDIAN		BLACK		ASIAN	
	Male	Female	Male	Female	Male	Female	Male	Female
ARIZONA	20,330	19,090	2,341	2,242	1,012	959	310	265
Percent	43.7	41.0	5.0	4.8	2.2	2.1	0.7	0.6
Apache	173	144	621	584	3	1	2	1
Cochise	662	647	10	10	57	44	42	34
Coconino	482	442	361	316	10	17	3	4
Gila	292	261	78	69	3	1	4	1
Graham	212	212	27	21	4	3	-	-
Greenlee	136	123	1	2	-	-	-	1
Maricopa	11,849	10,924	348	313	661	619	153	133
Mohave	338	343	17	20	1	1	1	2
Navajo	403	378	503	478	10	6	9	4
Pima	3,637	3,543	202	240	191	189	72	64
Pinal	698	670	110	113	26	36	1	1
Santa Cruz	229	227	-	1	-	2	1	1
Yavapai	438	412	17	17	1	3	1	3
Yuma	781	764	46	58	45	37	21	16

Table 4.2. Resident live births by race and sex of child: Arizona, 1979

Attendant at Birth and Place of Birth

Medical doctors and doctors of osteopathy were the attendants to 91.4 percent of the births occurring in Arizona in 1979. The remaining 8.6 percent were attended by certified nurse midwives, registered nurses and others. Table 4.3 shows that Apache County had the lowest proportion of births attended by doctors with 55.0 percent. Greenlee County recorded only one birth that was not attended by a doctor. Nearly all (98.4 percent) of the births in Arizona in 1979 occurred in a hospital. However, this percentage did vary by county. Yavapai County recorded the lowest percentage of in-hospital births with 95.0 percent, while Greenlee County recorded the highest with 99.6 percent.

COUNTY	ATTENDANT AT BIRTH		PLACE OF BIRTH	
	M.D. or D.O.	Other	In Hospital	Not In Hospital
ARIZONA	42,675	4,025	45,944	756
Percent	91.4	8.6	98.4	1.6
Apache	672	579	1,232	19
Cochise	1,408	24	1,413	19
Coconino	1,708	355	2,044	19
Gila	535	13	540	8
Graham	401	4	391	14
Greenlee	275	1	275	1
Maricopa	24,033	2,251	25,946	338
Mohave	763	15	746	32
Navajo	1,089	33	1,076	46
Pima	8,325	668	8,848	145
Pinal	782	12	759	35
Santa Cruz	335	13	334	14
Yavapai	746	36	743	39
Yuma	1,603	21	1,597	27

Table 4.3. Resident live births by attendant and place of birth: Arizona, 1979

Age of Mother

The majority of resident births in Arizona in 1979 occurred to women between the ages of 15 to 44 (99.7 percent). As shown by Table 4.4, the number of births increased as mother's age increased up to the age group 20 to 24 years. Thereafter, the number of births was inversely related to mother's age.

Table 4.4. Resident live births by county of residence by age group of mother: Arizona, 1979

RESIDENCE	MOTHER'S AGE GROUP								
	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Not Stated
ARIZONA	116	7,917	16,547	13,332	6,351	1,868	381	31	6
Percent	0.2	17.0	35.5	28.6	13.6	4.0	0.8	0.1	0.0
Apache	5	316	506	349	213	107	27	6	-
Cochise	-	244	587	416	183	60	15	1	-
Coconino	4	266	573	441	245	77	24	4	1
Gila	1	154	245	198	81	26	4	-	-
Graham	2	88	175	114	67	28	5	-	-
Greenlee	-	52	99	72	38	2	-	-	-
Maricopa	68	4,223	8,841	7,257	3,513	912	172	10	4
Mohave	3	134	295	172	82	29	7	1	-
Navajo	3	323	598	505	215	117	26	4	-
Pima	22	1,228	2,866	2,492	1,153	312	62	3	-
Pinal	4	409	567	439	167	55	12	1	1
Santa Cruz	-	50	144	162	72	28	5	-	-
Yavapai	2	130	309	267	131	46	7	-	-
Yuma	2	300	742	448	191	69	15	1	-

Table 4.5 shows the distribution of births to teenage women by specific age. In 1979, 8,033 infants were born to women 19 years of age and under (17.3 percent). Pinal County had the highest percentage of births to teenage women with 25.0, and Santa Cruz County had the lowest - 10.8 percent. Births by birth order and mother's age group are shown in Table 4.6. The majority of first order births (93.5 percent) were to women under 30 years of age. Conversely, 56.3 percent of women having four or more children were 30 or more years of age.

Table 4.5. Live births by county of residence by age of mother (19 and under): Arizona, 1979

RESIDENCE	TOTAL	AGE OF MOTHER							
		12	13	14	15	16	17	18	19
ARIZONA	8,033	2	18	96	392	910	1,530	2,186	2,899
Percent	100.0	0.0	0.2	1.2	4.9	11.3	19.0	27.2	36.1
Apache	321	-	1	4	11	43	65	92	105
Cochise	244	-	-	-	13	22	46	75	88
Coconino	270	-	-	4	8	27	50	74	107
Gila	155	-	-	1	6	8	30	46	64
Graham	90	-	-	2	5	10	12	23	38
Greenlee	52	-	-	-	1	4	11	11	25
Maricopa	4,291	1	8	59	216	505	828	1,204	1,470
Mohave	137	-	-	3	5	10	21	42	56
Navajo	326	-	1	2	21	32	65	93	112
Pima	1,250	-	6	16	67	150	233	303	475
Pinal	413	1	-	3	26	52	83	98	150
Santa Cruz	50	-	-	-	4	1	7	15	23
Yavapai	132	-	2	-	4	15	27	35	49
Yuma	302	-	-	2	5	31	52	75	137

LIVE BIRTH ORDER	TOTAL	AGE GROUP OF MOTHER								
		Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Not Stated
1	19,181	109	6,151	7,626	4,042	1,053	177	20	1	2
2	13,835	7	1,480	5,890	4,475	1,675	276	28	3	1
3	7,323	-	248	2,271	2,892	1,536	335	39	-	2
4	3,206	-	25	590	1,234	986	324	44	3	-
5	1,413	-	5	130	467	526	232	51	2	-
6	723	-	1	23	153	292	204	46	4	-
7	365	-	2	6	48	146	129	33	1	-
8	225	-	-	1	12	77	92	39	4	-
9	98	-	-	-	4	33	40	20	1	-
10+	162	-	-	1	3	26	59	61	12	-
Not Stated	18	-	5	9	2	1	-	-	-	1

Table 4.6. Resident live births by live birth order by mother's age group: Arizona, 1979

Prenatal Visits

The mean number of prenatal visits among women who had a low-weight birth (2500 grams or less) was 8.0 visits. For full-term births the mean of 10.1 visits was higher because of the longer gestational period. Table 4.7 shows that in comparing the number of prenatal visits by county, Santa Cruz County had the lowest mean for low-weight births with 6.3 visits while Graham County had the highest with 9.3 visits. Among the various races, white mothers had the highest mean number of prenatal visits (10.3). The lowest mean was 7.5 visits for American Indian mothers.

In 1979, only 1.8 percent of total births were to mothers who received no prenatal care. This percentage differed considerably by county (see Table 4.8). In Apache County, 8.1 percent of the births were to mothers who never visited a doctor during pregnancy. Conversely, Greenlee County recorded only one birth to a woman having received no prenatal care (0.4 percent).

COUNTY	MEAN NUMBER OF PRENATAL VISITS	
	2500 gm or less	2500 gm or more
ARIZONA	8.0	10.1
Apache	6.4	7.9
Cochise	7.6	9.9
Coconino	7.5	8.7
Gila	7.4	8.8
Graham	9.3	9.0
Greenlee	7.8	9.8
Maricopa	9.1	10.6
Mohave	6.9	8.6
Navajo	6.5	7.8
Pima	8.5	10.3
Pinal	7.4	9.6
Santa Cruz	6.3	8.0
Yavapai	7.6	10.9
Yuma	8.9	10.1

Table 4.7. Resident live births by mean number of prenatal visits by county by birthweight: Arizona, 1979

COUNTY	NUMBER OF PRENATAL VISITS							
	None	1-4	5-8	9-12	13-16	17-20	21+	Not Stated
ARIZONA	836	3,463	9,810	21,480	8,180	1,113	266	1,401
Percent	1.8	7.4	21.1	46.1	17.6	2.4	0.6	3.0
Apache	124	192	356	421	167	15	-	254
Cochise	17	100	395	692	250	28	8	16
Coconino	48	210	443	675	212	18	4	25
Gila	18	106	197	269	97	11	2	9
Graham	18	62	120	203	55	8	11	2
Greenlee	1	19	65	148	24	1	4	1
Maricopa	301	1,558	4,302	12,820	4,451	596	147	825
Mohave	14	66	272	235	64	17	1	54
Navajo	82	293	560	613	152	11	1	79
Pima	132	439	1,965	3,454	1,793	279	48	28
Pinal	29	177	394	694	317	16	8	20
Santa Cruz	13	76	176	144	47	5	-	-
Yavapai	12	48	151	463	118	57	30	13
Yuma	27	117	414	649	433	51	2	75

Table 4.8. Resident live births by county by number of prenatal visits: Arizona, 1979

The percentage of women receiving no prenatal care was inversely related to their years of education. As shown by Table 4.9, of women with no education, 19.9 percent had no prenatal care. This percentage decreased steadily to a low of 0.1 percent of women with post-graduate work.

EDUCATION	NUMBER OF PRENATAL VISITS							Not Stated
	None	1-4	5-8	9-12	13-16	17-20	21+	
None	32	44	37	32	12	-	-	4
1-8 years	201	664	1,176	1,234	343	47	9	225
9-12 years	520	2,288	6,276	12,318	4,644	651	159	706
13-16 years	67	413	2,038	6,899	2,835	358	85	67
17+ years	2	28	253	956	335	51	13	3
Not Stated	14	26	30	41	11	6	-	396

Table 4.9. Resident live births by education of mother by number of prenatal visits: Arizona, 1979

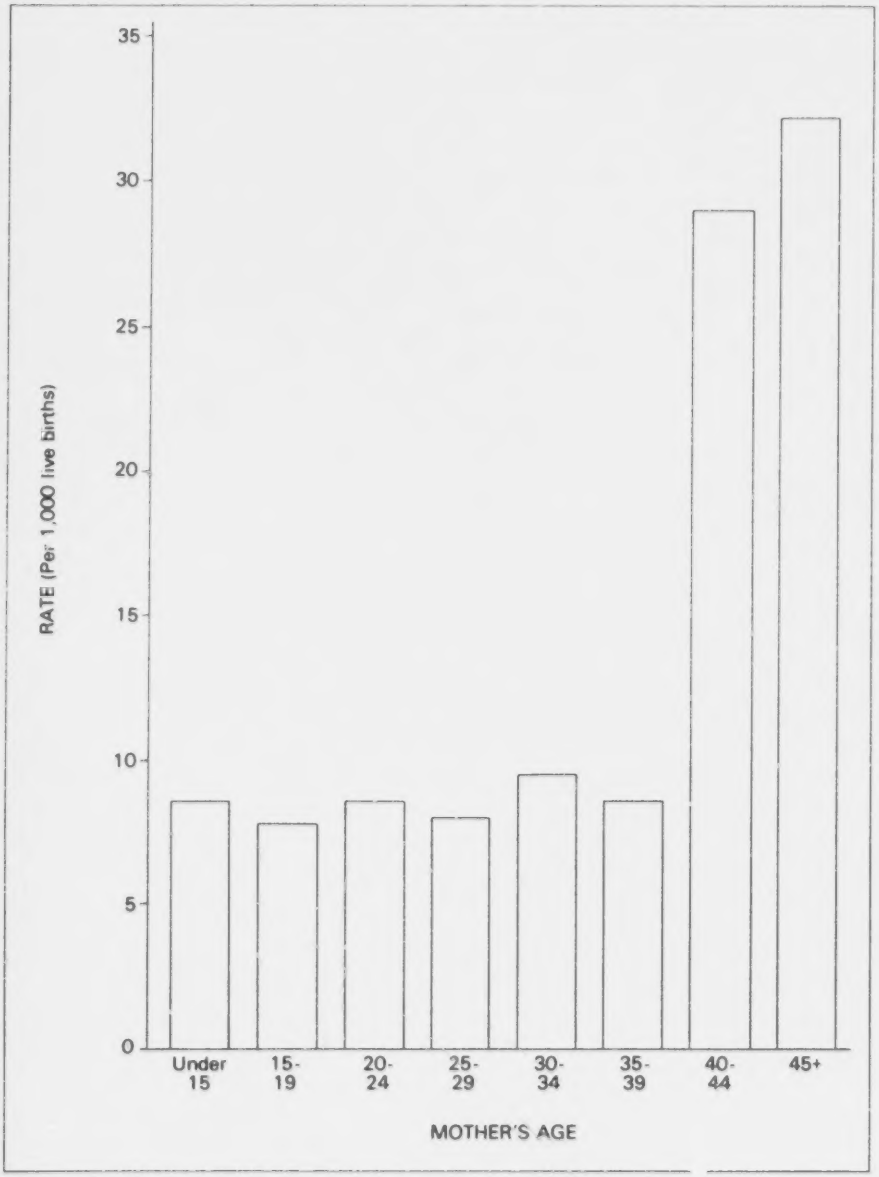


Figure 4.3. Rate of congenital anomalies by mother's age group: Arizona, 1979

Congenital Anomalies

Congenital anomalies were recorded on the birth certificate of 400 of the 46,549 births in 1979. Among these births, the most frequently reported congenital anomaly was of the musculoskeletal system and connective tissue—26.5 percent. The rate of births with anomalies varied by county. Apache County's rate of 2.6 per 1,000 live births was the lowest while the highest rate was in Navajo County where the rate was 17.9. The rate of congenital anomalies also varied among racial groups. White infants had the lowest rate of 8.1 while the rate for American Indian infants was the highest—11.8. The rate of congenital anomalies was higher for males than females—9.9 and 7.2 respectively. For total births, the rate was 8.6. Figure 4.3 shows the rate of births with congenital anomalies by mother's age group. The highest rates were among women in the age group 40-44 (28.9) and those women 45 years and over (32.3). The rate for all other age groups was below 10.

Low-Weight Births

In 1979, 6.1 percent of the resident live births were of low-birthweight. Two factors which affected this rate were race and mother's age. The variation among races is shown in Table 4.10. American Indians had the lowest incidence of low-weight births with a rate of 53.5 per 1,000 live births while the rate of 105.0 for blacks was the highest. Table 4.11 shows the number of low-weight births by mother's age group. Births to teenagers and women 40 and over had the highest rates of low-weight births - 82.3 and 92.2 respectively. The rate of 50.4 for births to women between 30 and 34 years was the lowest.

	TOTAL		WHITE		INDIAN		BLACK		ASIAN	
COUNTY	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
ARIZONA	2,845	61.1	2,346	59.5	245	53.5	207	105.0	47	81.7
Apache	89	58.2	25	78.9	64	53.1	-	-	-	-
Cochise	119	79.0	97	74.1	3	150.0	11	108.9	8	105.3
Coconino	117	71.6	77	83.3	33	10.7	5	185.2	2	285.7
Gila	40	56.4	30	54.2	10	68.0	-	-	-	-
Graham	28	58.5	24	56.6	3	62.5	1	142.9	-	-
Greenlee	12	45.6	12	46.3	-	-	-	-	-	-
Maricopa	1,505	60.2	1,317	57.8	28	42.4	137	107.0	23	80.4
Mohave	45	62.2	44	64.6	-	-	1	500.0	-	-
Navajo	112	62.5	45	57.6	65	66.3	2	125.0	-	-
Pima	511	62.8	437	60.9	24	54.3	39	102.6	11	80.9
Pinal	107	64.7	91	66.5	9	40.4	7	112.9	-	-
Santa Cruz	25	54.2	25	54.8	-	-	-	-	-	-
Yavapai	48	53.8	45	52.9	3	88.2	-	-	-	-
Yuma	87	49.2	77	49.8	3	28.8	4	48.8	3	81.1

*Rate per 1,000 live births

Table 4.10. Low-weight births and rates* by county of residence by race of child: Arizona, 1979

Births to Unwed Mothers

The proportion of births to unwed mothers has steadily increased from 10.8 percent in 1970 to 17.4 percent in 1979 (see Figure 4.4). In 1979 as in 1970, the counties with the highest proportion of births to unwed mothers were Apache and Navajo. No county has recorded a decline in the proportion of births to unwed mothers in the past decade.

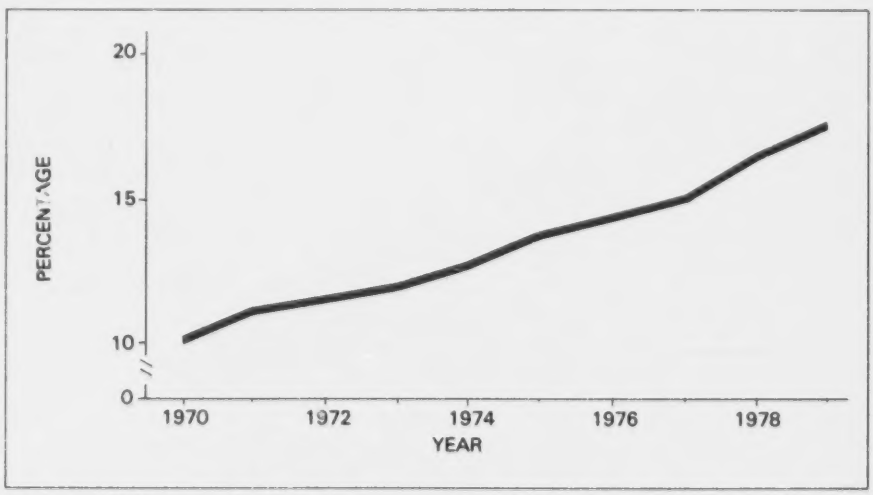


Figure 4.4. Births to unwed mothers as a percentage of total births: Arizona, 1979

Table 4.11. Low-weight births and rates by county of residence by mother's age group: Arizona, 1979

COUNTY	MOTHER'S AGE GROUP																
	UNDER 15		15-19		20-24		25-29		30-34		35-39		40-44		45+		Not Stated
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	
ARIZONA	16	137.9	645	81.5	956	57.8	738	55.4	320	50.4	131	70.1	34	89.2	4	129.0	1
Apache	-	-	24	75.9	27	53.4	13	37.2	15	70.4	7	65.4	3	111.1	-	-	-
Cochise	-	-	27	110.7	50	85.2	20	48.1	15	82.0	4	66.7	3	200.0	-	-	-
Coconino	-	-	26	97.7	43	75.0	27	61.2	12	49.0	4	51.9	3	125.0	1	250.0	1
Gila	-	-	8	51.9	14	57.1	15	75.8	2	24.7	-	-	1	250.0	-	-	-
Graham	1	500.0	3	34.1	11	62.9	5	43.9	4	59.7	4	142.9	-	-	-	-	-
Greenlee	-	-	2	38.5	4	40.4	5	69.4	1	26.3	-	-	-	-	-	-	-
Maricopa	10	147.1	357	84.5	505	57.1	397	54.7	160	45.5	56	61.4	18	104.7	2	200.0	
Mohave	-	-	11	82.1	11	37.3	13	75.6	7	85.4	2	69.0	1	142.9	-	-	-
Navajo	-	-	24	74.3	34	56.9	29	57.4	18	83.7	7	59.8	-	-	-	-	-
Pima	3	136.4	105	85.5	158	58.6	150	60.2	55	47.7	27	86.5	3	48.4	-	-	-
Pinal	2	500.0	32	78.2	31	54.7	22	50.1	9	53.9	8	145.5	2	166.7	1	1000.0	-
Santa Cruz	-	-	2	40.0	7	48.6	8	49.4	4	55.6	4	142.9	-	-	-	-	-
Yavapai	-	-	9	69.2	15	48.5	14	52.4	9	68.7	1	21.7	-	-	-	-	-
Yuma	-	-	15	50.0	36	48.5	20	44.6	9	47.1	7	101.4	-	-	-	-	-

*Rate per 1,000 live births

The highest percentages of births to unwed mothers were recorded among blacks and American Indians - 48.2 and 45.2 respectively. As shown by Table 4.12, Asian mothers recorded the smallest percentage of out-of-wedlock births—3.6 percent. The percentage among white mothers was 13.3. Table 4.13 provides a breakdown of births to unwed mothers by age and county of residence. The majority (42.2 percent) of the unwed mothers were women between 15 and 19 years of age. Births to unwed mothers as a percentage of total births was highest for women under 15 years (84.5 percent). The lowest proportion (6.9 percent) was among women between 30 and 34 years of age.

	RACE OF MOTHER									
	TOTAL		WHITE		AM. INDIAN		BLACK		ASIAN	
COUNTY	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
ARIZONA	8,097	17.4	5,360	13.3	1,969	45.2	751	48.2	17	3.6
Apache	529	34.6	20	6.1	507	42.3	2	66.7	-	-
Cochise	188	12.5	169	12.5	4	50.0	15	21.1	-	-
Coconino	352	21.5	74	7.8	266	40.1	11	61.1	1	20.0
Gila	130	18.3	69	12.3	61	42.7	-	-	-	-
Graham	72	15.0	52	12.1	18	39.1	2	50.0	-	-
Greenlee	26	9.9	26	10.0	-	-	-	-	-	-
Maricopa	4,130	16.5	3,253	14.1	318	54.7	549	51.1	10	4.5
Mohave	69	9.5	60	8.7	8	25.0	-	-	1	50.0
Navajo	451	25.2	55	6.8	395	40.7	1	16.7	-	-
Pima	1,431	17.6	1,078	14.6	229	58.7	120	46.0	4	3.4
Pinal	350	21.1	193	13.9	124	58.5	33	58.9	-	-
Santa Cruz	69	15.0	68	14.8	-	-	-	-	1	100.0
Yavapai	80	9.0	73	8.5	7	26.9	-	-	-	-
Yuma	220	12.4	170	10.7	32	39.5	18	30.0	-	-

Table 4.12. Births to unwed mothers by county of residence by race of mother: Arizona, 1979

Table 4.13. Births to unwed mothers by county of residence by mother's age: Arizona, 1979

COUNTY	TOTAL	MOTHER'S AGE														
		12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45+	Not Stated
ARIZONA	8,097	2	17	79	307	564	768	874	904	2,825	1,111	438	161	44	-	3
Percent	100.0	0.0	0.2	1.0	3.8	7.0	9.5	10.8	11.2	34.9	13.7	5.4	2.0	0.5	-	0.0
Apache	529	-	1	3	10	38	43	56	50	192	80	38	15	3	-	-
Cochise	188	-	-	-	8	10	19	24	25	76	14	9	2	1	-	-
Coconino	352	-	-	3	7	18	30	39	49	117	51	23	11	3	-	1
Gila	130	-	-	1	6	7	11	10	18	48	19	6	3	1	-	-
Graham	72	-	-	2	4	2	4	8	8	24	12	2	5	1	-	-
Greenlee	26	-	-	-	-	-	1	2	3	14	5	1	-	-	-	-
Maricopa	4,130	1	8	49	171	322	428	466	460	1,405	515	216	72	16	-	1
Mohave	69	-	-	1	2	4	8	7	3	36	4	2	2	-	-	-
Navajo	451	-	1	2	16	23	41	59	47	145	85	16	12	4	-	-
Pima	1,431	-	5	13	59	94	121	129	153	509	214	99	25	10	-	-
Pinal	350	1	-	3	17	24	36	38	40	129	46	10	4	1	-	1
Santa Cruz	69	-	-	-	1	1	3	4	10	20	23	3	3	1	-	-
Yavapai	80	-	2	-	3	7	3	10	8	26	13	3	3	2	-	-
Yuma	220	-	-	2	3	14	20	22	30	84	30	10	4	1	-	-

Section V
Mortality

An Overview

Between 1912, the year Arizona became a state, and 1979, the number of deaths occurring to Arizona residents increased from 3,297 to 19,648. The 3,297 deaths recorded in 1912 was the lowest number of resident deaths in this century while the 19,648 deaths represented the highest (figure 5.1). Although the total number of deaths increased between 1912 and 1979, the death rate decreased (figure 5.2). The death rate in 1979 was 7.5 per 1,000 population. The death rate of 7.5 tied the 1965 rate as the lowest death rate ever recorded in Arizona.

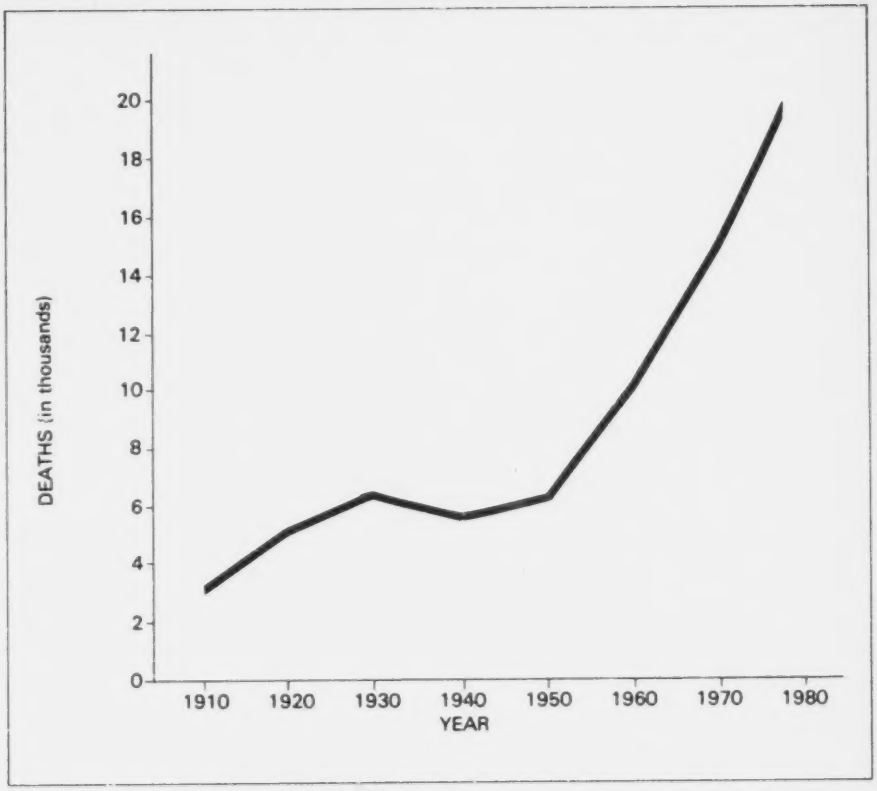


Figure 5.1. Total deaths: Arizona, 1910-1979

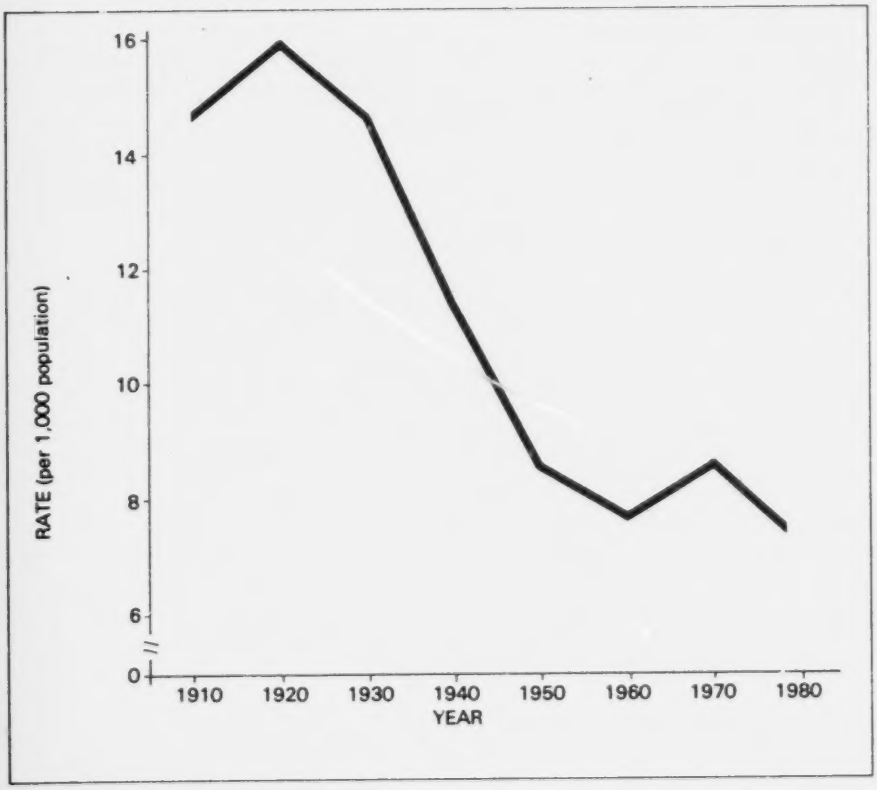


Figure 5.2. Death rates: Arizona, 1910-1979

Of the 19,648 resident deaths, 11,522 occurred to males, and 8,126 occurred to females (Table 5.1). Among the various races, white deaths numbered 18,033 and accounted for 91.8 percent of all deaths. Deaths to Indians numbered 1,026 while 540 deaths occurred to blacks. The remaining 49 deaths were among Asians (Table 5.1).

Table 5.1. Resident deaths by county by sex and race: Arizona, 1979

COUNTY	TOTAL DEATHS	SEX		RACE			
		Male	Female	White	Am. Ind.	Black	Asian
ARIZONA	19,648	11,522	8,126	18,033	1,026	540	49
Apache	314	206	108	72	241	1	-
Cochise	595	349	246	568	4	20	3
Coconino	319	208	111	196	119	4	-
Gila	377	214	163	336	40	1	-
Graham	174	103	71	156	15	3	-
Greenlee	60	30	30	59	1	-	-
Maricopa	10,919	6,277	4,642	10,425	136	331	27
Mohave	442	268	174	425	14	2	1
Navajo	437	285	152	223	205	9	-
Pima	3,832	2,214	1,618	3,578	127	113	14
Pinal	708	435	273	597	85	24	2
Santa Cruz	135	74	61	130	1	4	-
Yavapai	724	442	282	717	6	1	-
Yuma	612	417	195	551	32	27	2

COUNTY	TOTAL DEATHS	INFANT DEATHS	AGE					
			1-4	5-14	15-24	25-44	45-64	65+
ARIZONA	19,648	635	144	143	737	1,377	4,344	12,268
Apache	314	33	9	4	35	63	48	122
Cochise	595	25	4	4	16	34	139	373
Coconino	319	34	4	9	27	48	72	125
Gila	377	10	2	2	9	28	86	240
Graham	174	4	2	3	9	16	27	113
Greenlee	60	3	-	-	3	5	19	30
Maricopa	10,919	344	69	75	371	684	2,445	6,931
Mohave	442	8	1	-	25	33	118	257
Navajo	437	32	6	9	45	60	91	194
Pima	3,832	83	23	23	113	250	801	2,539
Pinal	708	23	11	8	33	68	164	401
Santa Cruz	135	4	2	-	8	9	28	84
Yavapai	724	11	5	2	18	28	157	503
Yuma	612	21	6	4	25	51	149	356

Table 5.2. Resident deaths by county by age at death: Arizona, 1979

In 1979, 12,268 deaths occurred to persons over the age of 65 (Table 5.2). This constituted 62.4 percent of all deaths. Among females, 68.2 percent of total deaths occurred to women 65 and over, as compared to only 58.2 percent for males.

Leading Causes of Death

The ten leading causes of death in Arizona accounted for 82.7 percent of all deaths in 1979. These leading causes of death have remained much the same as they have in recent years. Since 1970, heart disease and cancer have ranked first and second among causes of death. Accidents and stroke have alternately ranked third and fourth. Among the other ten leading causes of death, suicide has shown the most significant change. Suicide increased in ranking from tenth in 1970 to seventh in 1979.

As compared in the United States, the rank order of the leading causes of death vary with that of Arizona. As shown by Table 5.3, heart disease and cancer rank one and two both in Arizona and in the United States. However, the next eight causes vary slightly.

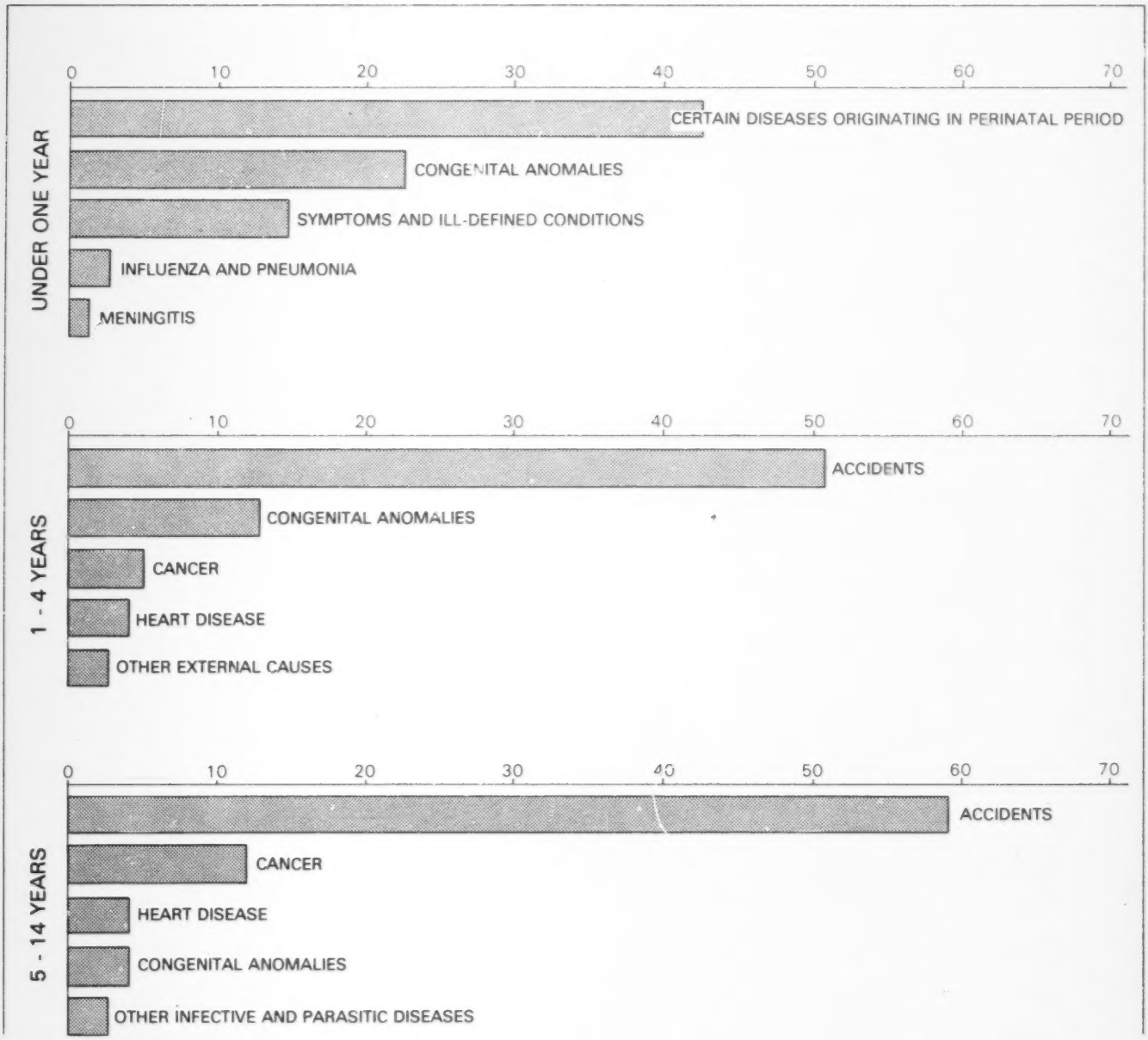
CAUSE OF DEATH	ARIZONA		UNITED STATES	
	Rate*	Rank	Rate*	Rank
Heart disease	239.3	1	330.4	1
Cancer	155.0	2	183.5	2
Accidents	64.4	3	47.0	4
Stroke	53.4	4	76.5	3
Chronic obstructive pulmonary disease	34.5	5	22.7	5
Influenza and pneumonia	18.3	6	20.0	6
Suicide	17.1	7	11.7	10
Alcoholism**	12.8	8	N.A.	-
Diabetes	10.4	9	15.0	8
Certain diseases in early infancy	10.3	10	10.5	11
Symptoms and ill-defined conditions	10.3	11	16.5	7
Atherosclerosis	9.5	12	13.0	9

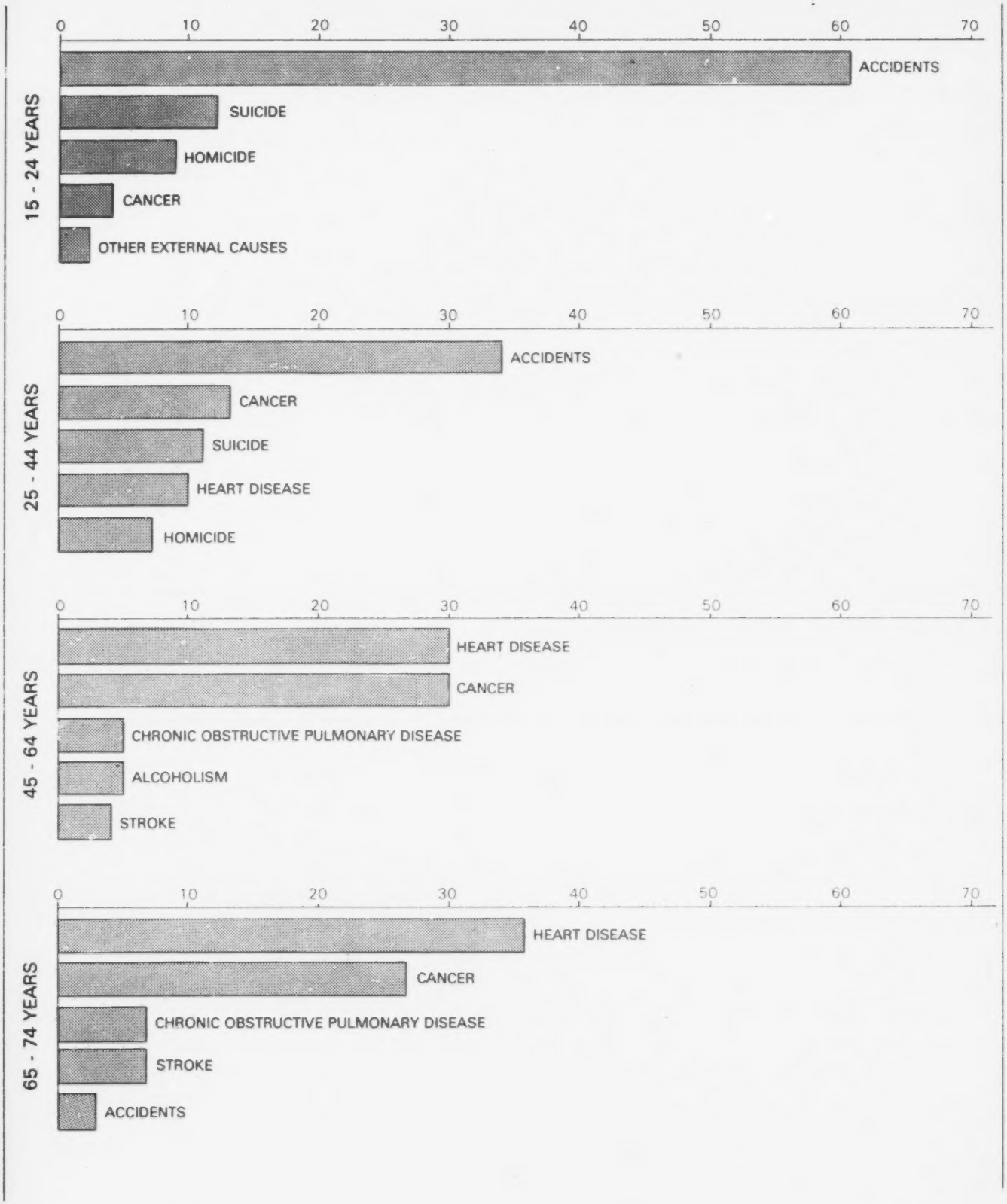
*Rate per 100,000 population
**U.S. classification of alcoholism deaths not comparable to Arizona classification

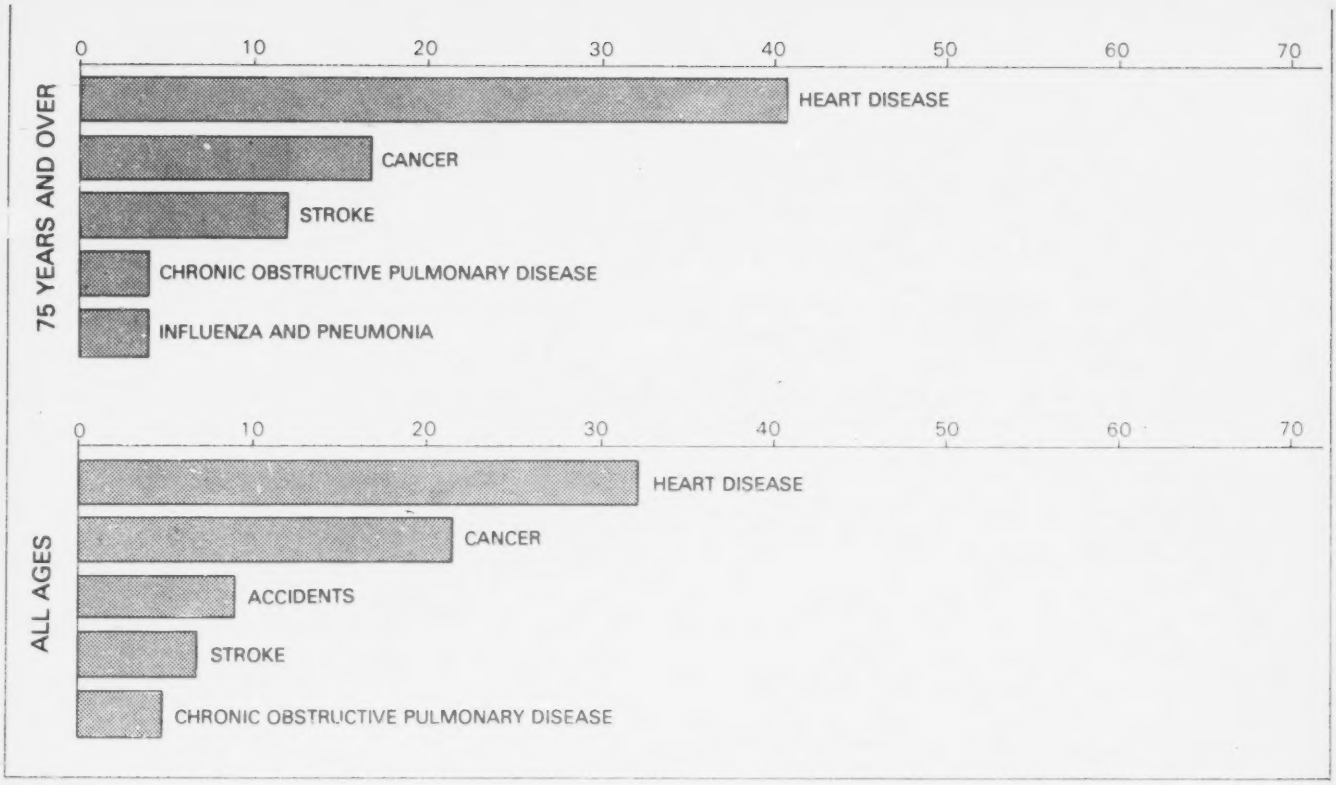
Table 5.3. Leading causes of deaths by rate: United States and Arizona, 1979

Mortality by cause differs by age group, as shown by Figure 5.3, heart disease, the most frequent cause of death in Arizona, is the leading cause of death in every age category over 45 years. The variation in leading causes of death by age is most evident among deaths to infants under one year of age. This category has little similarity to any other age group. Among persons one through 44 years of age, external causes of death, including homicide, suicide and accidents are predominant killers. At ages 45 years and over, chronic conditions are responsible for the largest percentage of deaths.

Figure 5.3. Leading causes of death by age group: Arizona, 1979




15 - 24 YEARS
0
10
20
30
40
50
60
70
ACCIDENTS
SUICIDE
HOMICIDE
CANCER
OTHER EXTERNAL CAUSES
25 - 44 YEARS
0
10
20
30
40
50
60
70
ACCIDENTS
CANCER
SUICIDE
HEART DISEASE
HOMICIDE
45 - 64 YEARS
0
10
20
30
40
50
60
70
HEART DISEASE
CANCER
CHRONIC OBSTRUCTIVE PULMONARY DISEASE
ALCOHOLISM
STROKE
65 - 74 YEARS
0
10
20
30
40
50
60
70
HEART DISEASE
CANCER
CHRONIC OBSTRUCTIVE PULMONARY DISEASE
STROKE
ACCIDENTS



Heart Disease

Heart disease is the largest cause of death in Arizona and in the United States, accounting for one of every three deaths in Arizona. In 1979, 6,295 Arizona residents died from diseases of the heart. This represented 32.0 percent of all deaths. Heart disease took more lives than the next two largest causes combined; namely cancer and accidents.

Of the total deaths due to heart disease, 3,704 (58.8 percent) were to males and 2,591 (41.2 percent) were to females. For males, the heart disease death rate was substantially higher than that for females (284.8 as compared to 194.8). This difference was especially true among the older age groups, with the greatest differential noted for the age groups 45 years of age and older.

Among the various types of heart disease, the most prevalent condition in Arizona was acute myocardial infarction, commonly referred to as a "coronary" (2,305 deaths in 1979). Almost as frequent was chronic ischemic heart disease (i.e., a condition where the blood supply to a part of the body is diminished or stopped). There were 2,246 deaths attributed to this cause in 1979. Together, these two causes of heart disease deaths accounted for 72.2 percent of all Arizona heart disease deaths. The remaining 27.8 percent of heart disease deaths, if considered separately, would comprise the third leading cause of death in the state.

Cancer

The second leading cause of death in Arizona and in the United States is cancer. In the past 10 years, cancer death rates have been steadily increasing. In 1970, the cancer death rate in Arizona was 139.4 per 100,000 population. In 1979, the rate increased to 155.0; this represents an 11.2 percent increase in cancer mortality in the past 10 years. Like that of Arizona, the national cancer death rate rose during this decade, recording a 13.2 percent increase. As shown by figure 5.4, in the past 10 years, Arizona's cancer death rate has remained below the national rate.

In 1979, cancer was responsible for taking the lives of 4,077 Arizona residents. Of the leading causes of death, cancer has the most widespread incidence of any condition, appearing as a leading cause in every age group except in the category under one year of age. Among the various types of cancer deaths, the most common underlying cause was malignant neoplasm of the trachea, bronchus and lung.

In 1979, 25.3 percent of all cancer deaths were attributed to this cause. The second most frequent cause of cancer mortality was cancer of the large intestine (379 deaths). Breast cancer (317 deaths) was third, while malignant neoplasms of the prostate and pancreas were fourth and fifth. Among males, cancer of the respiratory system was the leading cause of cancer mortality while breast cancer was number one among females. In 1979, one out of every three cancer deaths among men was respiratory related.

Accidents

In the past 10 years, Arizona's accidental death rate has been progressively decreasing. In 1970, Arizona's accidental death rate was 79.6 per 100,000 population. In 1979, the rate decreased to 64.4. Arizona's rates have been above the national rates in his 10-year period; this is attributed to Arizona's high motor vehicle death rate. In Arizona in 1979, motor vehicle (traffic and off-road) accidents accounted for 993 deaths or 58.6 percent of all accidental deaths.

In 1979, 8.6 percent of all Arizona resident deaths were caused by accidents. Of the total 1,695 accidental deaths, 1,219 (71.9 percent) were to males while 476 (28.1 percent) were to females. The accidental death rate among males of 93.7 per 100,000 population was over twice the female rate of 35.8. In all age groups, the male accidental death rate was greater than that of the female.

Accidents in Arizona in 1979 were the leading cause of death in the age groups one to four, five to 14, 15 to 24, and 25 to 44 (see Figure 5.1). In these age groups, accidental deaths accounted for 44.7 percent of all deaths and far exceeded any other cause of death.

Cerebrovascular Disease

Cerebrovascular disease (stroke) was the fourth leading cause of death in Arizona in 1979. Cerebrovascular diseases accounted for 1,404 Arizona resident deaths or 7.1 percent of the total. In the past 10 years, Arizona has recorded a 29.5 percent decrease in its cerebrovascular disease death rate, while the United States had a 24.8 percent decrease. In this period, Arizona's rate has been considerable lower than that of the United States. In 1979, Arizona's rate of

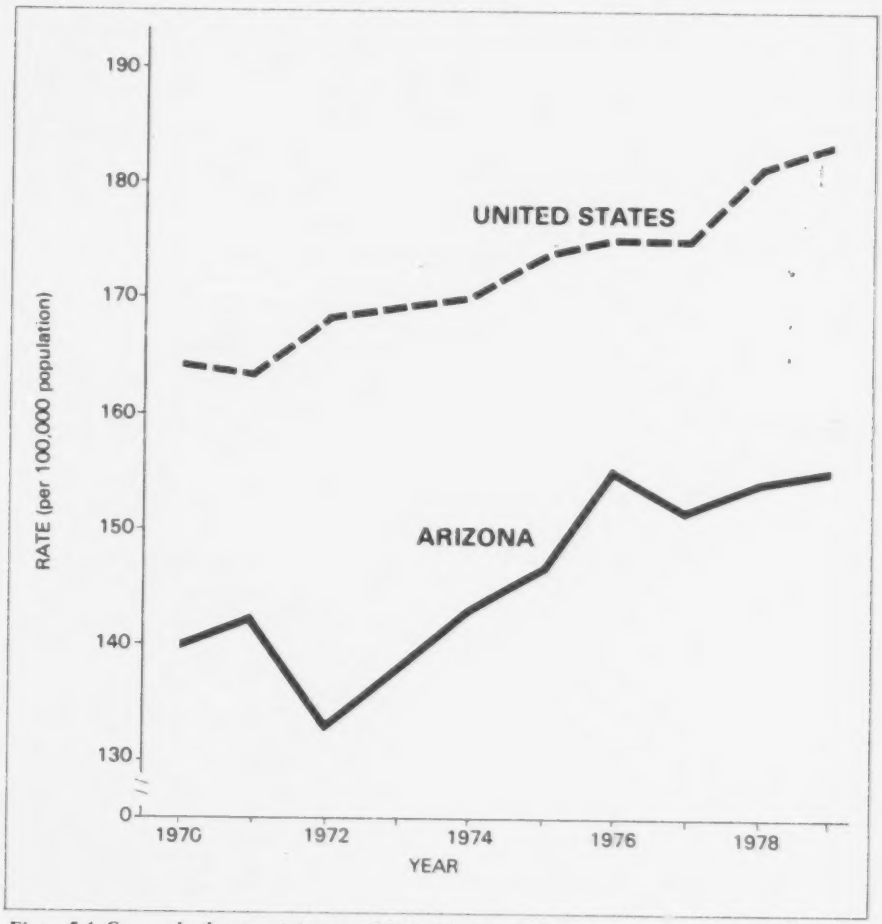


Figure 5.4. Cancer death rates: Arizona and United States, 1970-1979

53.4 per 100,000 population was 30.2 percent less than the United States' rate of 76.5.

Among the various age groups, cerebrovascular diseases were more frequent among older age groups. In the age group 45 to 64 years, the death rate was 38.8. This rate was substantially lower than that of the 65 to 74 year old age group (172.0) and the 75 years and over group (843.4).

Influenza and Pneumonia

Influenza and pneumonia took the lives of 481 Arizona residents in 1979. Of these deaths, 274 were males and 207 were females. The influenza and pneumonia death rate was higher for males than females in 1979. The overall rate was 18.3 per 100,000 population while males had a rate of 21.1 and females had a rate of 15.6. The age-specific rates for males were above those for females for most age groups. The rate of death due to influenza and pneumonia for the under one year age group was the highest rate observed for the younger ages. Among this age group, influenza and pneumonia ranked among the leading causes of death. The highest death rates from this cause of death were among age groups over 65 years of age. Among persons in the age group 65 to 74 years, the death rate from influenza and pneumonia was 42.1. Among those persons 75 years and older, the death rate was higher at 285.0.

Suicides

In the past ten years, Arizona's suicide death rate has consistently been higher than the national rate. In 1979, the Arizona rate of 17.1 per 100,000 population exceeded the national rate of 11.7. Although Arizona's current rate is considerable higher than the national rate, the rate in Arizona has decreased in the past two years. In 1977, Arizona recorded a record high rate of 21.0. In 1978, the suicide rate was 19.0. Suicides in Arizona were predominantly the result of four types of injuries. Self-inflicted injury by firearms and explosives caused 309 deaths in 1979. Self-inflicted poisoning by solid and liquid substances resulted in 78 deaths. Hanging or strangulation resulted in another 22 deaths. Combined with 15 deaths due to poisoning by gases, these four types of suicide accounted for 94.4 percent of all suicides of Arizona residents in 1979.

Suicides were the seventh leading cause of death in Arizona in 1979. Among males, suicide deaths were more frequent than that of females. Males comprised 73.5 percent of the total with 330 suicides; there were 119 female suicide deaths. Suicides by males had a relative frequency nearly triple that of females with rates of 25.3 and 8.9 respectively. Age specific rates were higher for males among all age groups. Among young persons, suicide is a leading cause of death. Suicide ranked second next to accidents, as a leading cause of death among persons aged 10-19 years.

Infant Mortality

Of the 19,648 deaths of Arizona residents in 1979, 635 occurred to individuals under one year of age. The frequency of infant deaths in Arizona has decreased by 32 percent since 1950, when Arizona recorded 937 infant deaths. The infant death rate has also shown a considerable decrease, declining from 45.7 per 1,000 live births in 1950 to 13.6 in 1979. Nationally, the infant death rate has shown a similar decrease, falling from 29.2 in 1950 to 13.0 in 1979.

Infant mortality rates for Arizona and the United States are provided in Table 5.4. From 1950 to 1969, the Arizona infant death rate was higher than the national rate; not until 1970 did the state rate drop below the U.S. rate. However, in 1979, the state rate increased to 13.6 while the national rate decreased to 13.0.

YEAR	RATE*		YEAR	RATE*	
	United States	Arizona		United States	Arizona
1950	29.2	45.7	1965	24.7	25.3
1951	28.4	49.4	1966	23.7	27.4
1952	28.4	44.1	1967	22.4	22.6
1953	27.8	48.9	1968	21.8	22.8
1954	26.6	39.4	1969	20.7	21.3
1955	26.4	34.6	1970	19.8	17.8
1956	26.0	32.4	1971	19.2	18.4
1957	26.3	35.9	1972	18.5	16.7
1958	27.1	33.5	1973	17.7	15.4
1959	26.4	33.2	1974	16.5	14.9
1960	26.0	31.8	1975	16.1	14.8
1961	25.3	31.3	1976	15.1	15.3
1962	25.3	29.1	1977	14.0	13.4
1963	25.2	28.9	1978	13.7	13.1
1964	24.8	26.3	1979	13.0	13.6

*Rate per 1,000 live births

Table 5.4. Infant death rates: Arizona and United States residents, 1950-1979

Maternal Mortality

Three Arizona mothers were reported to have died in 1979 from complications of pregnancy, childbirth and the puerperium, giving a maternal mortality rate of 0.6 per 10,000 live births. Since 1950, the maternal death rate in Arizona has progressively decreased. In 1950, the maternal death rate of 10.7 far exceeded the 1979 rate of 0.6. This trend parallels that of the nation, whose maternal death rate fell from 8.3 in 1950 to 0.9 (est) in 1979 (Table 5.5).

Table 5.5. Maternal mortality rates: Arizona and United States residents, 1950-1979

	RATE*	
YEAR	Arizona	United States
1950	8.3	10.7
1960	3.7	3.0
1961	3.7	2.7
1962	3.5	3.2
1963	3.6	5.4
1964	3.4	4.4
1965	3.2	3.3
1966	2.9	2.5
1967	2.8	0.6
1968	2.5	5.2
1969	2.2	2.9
1970	2.2	1.6
1971	1.9	0.8
1972	1.9	2.1
1973	1.5	0.5
1974	1.5	1.3
1975	1.3	0.8
1976	1.2	0.8
1977	1.1	1.2
1978	1.0	1.1
1979	0.9	0.6

*Rate per 10,000 live births

Section VI
Abortions

Residence

In 1979, 7,811 abortions were recorded in Arizona. The majority of these (97.9 percent) were to Arizona residents. There were 113 (1.4 percent) reported abortions in Arizona to nonresidents (Table 6.1). Nonresident abortions were performed on women who resided in one of 25 other states and three foreign countries. The majority of these nonresidents (46.0 percent) resided in either California, New Mexico, Nevada or Mexico.

COUNTY	RESIDENCE	OCCURRENCE
ARIZONA	7,811	7,811
Apache	94	95
Cochise	94	-
Coconino	279	2
Gila	55	-
Graham	21	-
Greenlee	9	-
Maricopa	5,645	6,361
Mohave	44	-
Navajo	59	1
Pima	997	1,146
Pinal	150	-
Santa Cruz	32	-
Yavapai	100	-
Yuma	59	13
Out-of-State	5	-
Not Stated	168	193

Table 6.1. Abortions by county of residence and county of occurrence: Arizona, 1979

Age

Of the abortions performed in Arizona in 1979, 68.5 percent were performed among women between the ages 15 to 24 years. Table 6.2 shows that less than one percent (59 out of 7,811) of the reported abortions were on women under 15 years of age. The mean age of women receiving abortions in 1979 was 22.6 years while the median age was 21.6 years.

Marital Status

Married women accounted for 19.5 percent of all abortions performed in Arizona in 1979. Women who were never married accounted for the majority of reported abortions—60.1 percent. Divorced women recorded 11.9 percent while separated and widowed women recorded 4.0 percent. A comparison of marital status by age group shows that the highest percentage (94.9 percent) of unmarried women were 10 to 14 years of age (see Figure 6.1). This percentage decreased steadily to a low of 20.0 percent for women 45 years of age and older.

Figure 6.1. Percent of abortions to unwed women by age: Arizona, 1979

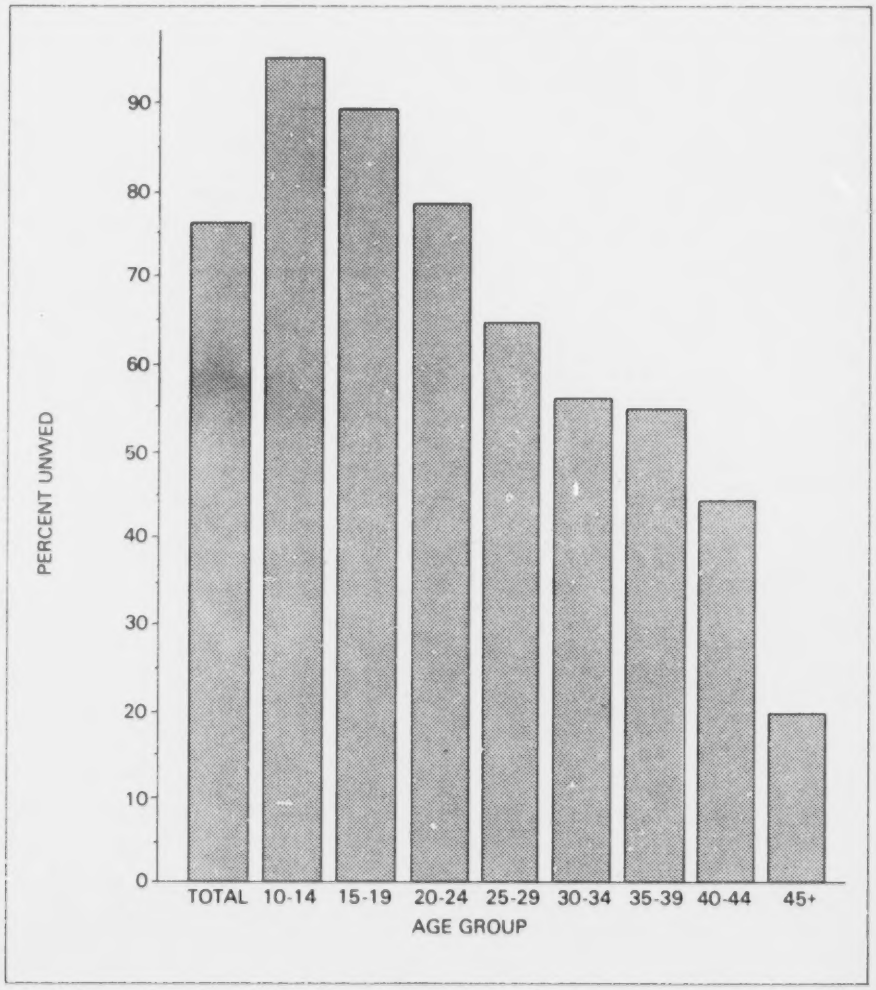


Table 6.2. Abortions by county of residence by age of mother: Arizona, 1979

COUNTY OF RESIDENCE	TOTAL	AGE GROUP								
		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+	Not Stated
ARIZONA	7,811	59	2,429	2,923	1,356	591	217	66	5	165
Percent	100.0	0.8	31.1	37.4	17.4	7.6	2.8	0.8	0.1	2.1
Apache	94	1	18	35	21	12	4	2	-	1
Cochise	94	1	24	41	18	6	1	2	-	1
Coconino	279	1	89	127	43	11	6	-	-	2
Gila	55	1	18	22	8	5	-	-	-	1
Graham	21	-	7	8	3	1	-	-	-	2
Greenlee	9	-	2	2	2	2	-	-	-	1
Maricopa	5,645	47	1,820	2,082	962	440	152	50	5	87
Mohave	44	1	22	11	6	1	2	-	-	1
Navajo	59	-	14	21	12	8	3	-	-	1
Pima	997	3	248	409	194	72	32	9	-	30
Pinal	150	4	61	42	24	10	3	1	-	5
Santa Cruz	32	-	6	15	7	-	2	1	-	1
Yavapai	100	-	36	29	24	9	2	-	-	-
Yuma	59	-	33	20	2	3	1	-	-	-
Out-of-state	5	-	-	2	2	1	-	-	-	-
Not Stated	168	-	31	57	28	10	9	1	-	32

Race

In 1979, 82.9 percent of women getting abortions were white while 12.1 percent were nonwhite. The race was not stated for the remaining 5.0 percent. The racial distribution of women getting abortions was similar to the racial distribution of women recording live births—84.7 percent white and 15.3 percent nonwhite. Table 6.3 gives detailed statistics on the race of women getting abortions by county of residence.

COUNTY OF RESIDENCE	TOTAL	RACE				
		White	Am. Indian	Black	Other	Not Stated
ARIZONA	7,811	6,479	223	269	453	387
Percent	100.0	82.9	2.9	3.4	5.8	5.0
Apache	94	20	72	-	-	2
Cochise	94	62	-	13	17	2
Coconino	279	237	10	3	9	20
Gila	55	40	7	-	4	4
Graham	21	13	3	1	-	4
Greenlee	9	6	-	-	3	-
Maricopa	5,645	4,818	67	204	314	242
Mohave	44	40	2	-	-	2
Navajo	59	42	16	-	-	1
Pima	997	810	16	39	77	55
Pinal	150	113	9	3	11	14
Santa Cruz	32	27	1	-	4	-
Yavapai	100	95	1	-	-	4
Yuma	59	52	2	-	2	3
Out-of-state	5	1	2	1	-	1
Not Stated	168	103	15	5	12	33

Table 6.3. Abortions by county of residence by race: Arizona, 1979

Previous Abortions/ Live Births

In 1979, 25.9 percent of women obtaining abortions had undergone a previous abortion. Of the 2,022 women who reported a previous abortion, the majority (81.1 percent) had received only one previous abortion. Table 6.4 also shows the percentage distribution of women who had obtained an abortion according to the number of previous live births. Of these women, 63.3 percent had recorded no previous live birth.

	PREVIOUS TERMINATIONS		PREVIOUS LIVE BIRTHS	
	Number	Percent	Number	Percent
TOTAL	7,811	100.0	7,811	100.0
None	5,789	74.1	4,948	63.3
1	1,640	21.0	1,323	16.9
2	305	3.9	965	12.4
3	59	0.8	364	4.7
4+	18	0.2	211	2.7

Table 6.4. Abortions by previous terminations and previous live births: Arizona, 1979

Type of Procedure by Weeks of Gestation

Suction curettage accounted for 98.6 percent of total abortions performed during the first 15 weeks of gestation. After 15 weeks of gestation, prostaglandin amniotic fluid exchange became the most frequent termination procedure accounting for 78.3 percent. Table 6.5 provides the percentage of abortions by type of termination procedure by length of gestation.

	TOTAL		WEEKS OF GESTATION					
	Number	Percent	8	9-12	13-15	16-19	20+	Not Stated
TOTAL	7,811	100.0	3,350	3,795	504	56	13	93
Suction Curettage	7,645	97.9	3,304	3,743	498	8	2	90
Sharp Curettage	35	0.4	16	17	1	-	-	1
Saline Amniotic Fluid Exchange	11	0.1	-	2	-	8	1	-
Prostaglandin Amniotic Fluid Exchange	45	0.6	-	-	-	40	5	-
Not Stated	75	1.0	30	33	5	-	5	2

Table 6.5. Abortions by type of procedure by weeks of gestation: Arizona, 1979

Section VII
Marriage and Divorce

Marriages in Arizona increased by seven percent between 1978 and 1979 (Table 7.1). The marriage rate also increased from 11.2 per 1,000 population to 11.3. As shown in Table 7.2, this is the first rate increase since 1973. Among Arizona's 14 counties, the lowest marriage rate was in Apache County where 2.8 marriages per 1,000 population were recorded. The highest rate was recorded in Yuma County with a rate of 34.4. The rates for the two metropolitan counties were near Arizona's rate, with Maricopa's rate being lower (10.7) and Pima's rate being slightly higher (11.4).

Table 7.1. Marriages by county of occurrence: Arizona, 1970-1979

COUNTY	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
ARIZONA	19,069	20,865	23,318	26,180	27,038	26,558	26,534	26,955	27,725	29,603
Apache	103	127	159	139	125	146	133	105	160	138
Cochise	681	729	789	840	834	874	889	998	854	969
Coconino	561	567	615	753	711	645	590	645	561	683
Gila	391	401	421	523	503	469	451	437	451	497
Graham	208	216	251	237	216	292	270	306	259	269
Greenlee	103	123	111	137	116	150	114	107	108	123
Maricopa	10,193	10,630	12,404	13,330	13,341	13,022	13,241	14,011	14,865	15,596
Mohave	121	176	200	209	232	223	282	243	321	377
Navajo	328	360	396	428	420	420	455	458	566	546
Pima	3,933	4,364	4,929	4,856	5,178	5,252	5,116	5,113	5,296	5,957
Pinal	746	884	961	1,073	914	791	907	846	824	917
Santa Cruz	364	375	365	402	383	316	313	305	345	324
Yavapai	382	363	445	457	477	465	471	530	497	522
Yuma	955	1,117	1,272	2,896	3,615	3,493	3,302	2,851	2,618	2,685

COUNTY	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
ARIZONA	10.8	11.2	11.9	12.6	12.6	11.9	11.7	11.5	11.2	11.3
Apache	3.2	3.6	4.4	3.6	3.1	3.6	3.0	2.4	3.3	2.8
Cochise	11.0	11.0	11.5	11.6	11.5	11.8	11.8	13.0	10.9	11.8
Coconino	11.6	10.8	10.9	12.5	11.4	9.9	8.7	9.6	7.4	8.4
Gila	13.4	13.2	13.7	13.2	15.4	14.4	13.8	13.1	13.0	13.9
Graham	12.5	12.6	14.6	12.9	11.3	14.5	13.4	15.0	12.6	12.3
Greenlee	10.0	11.2	10.1	12.0	9.7	12.6	9.9	9.6	9.4	10.4
Maricopa	10.5	10.9	11.6	11.8	11.4	10.7	10.7	10.9	10.9	10.7
Mohave	4.7	6.3	6.6	6.2	6.6	6.0	7.2	5.8	7.3	7.7
Navajo	6.9	7.1	7.6	8.0	7.6	7.2	7.4	7.4	8.0	7.4
Pima	11.2	11.7	12.5	11.7	11.9	11.9	11.3	11.0	11.0	11.4
Pinal	10.9	12.1	12.7	13.3	11.0	9.0	10.4	9.4	9.4	10.0
Santa Cruz	26.1	25.5	23.7	24.5	22.4	18.3	18.6	16.8	18.1	16.5
Yavapai	10.3	9.1	10.2	9.8	9.8	9.5	9.5	9.3	8.3	8.5
Yuma	15.7	17.6	19.6	43.5	53.3	49.7	48.6	38.1	34.7	34.4

*Per 1,000 estimated midyear population

Table 7.2. Marriage rates by county of occurrence: Arizona, 1970-1979

Whereas marriages increased by seven percent between 1978 and 1979, divorces increased by 15 percent. The 19,982 divorces in 1979 is the highest number ever recorded in any one year in Arizona (Table 7.3). The divorce rate also increased between 1978 and 1979 from 7.0 per 1,000 population to 7.6 (Table 7.4). As with marriages, the lowest divorce rate was recorded in Apache County (2.1) and the

COUNTY	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
ARIZONA	13,298	14,397	13,197	14,036	16,926	17,577	19,029	16,578	17,320	19,982
Apache	34	37	52	34	63	35	58	50	97	101
Cochise	403	420	357	353	607	657	716	575	705	708
Coconino	280	322	345	377	347	380	375	409	384	433
Gila	219	242	232	176	252	315	278	217	193	243
Graham	131	109	86	110	134	192	164	134	123	164
Greenlee	55	65	49	58	75	84	76	55	67	51
Maricopa	8,023	8,798	7,749	8,219	9,800	9,826	11,051	9,415	9,938	11,730
Mohave	126	134	180	234	295	342	426	337	388	443
Navajo	140	136	172	184	172	224	232	219	229	273
Pima	2,703	3,156	2,681	3,188	3,615	3,772	3,880	3,245	3,422	3,834
Pinal	449	340	497	385	517	531	461	441	504	643
Santa Cruz	42	54	56	64	91	73	92	97	73	113
Yavapai	216	209	232	260	389	351	423	576	475	466
Yuma	477	375	510	434	579	795	797	808	722	780

Table 7.3. Divorces by county of occurrence: Arizona, 1970-1979

Table 7.4. Divorce rates by county of occurrence: Arizona, 1970-1979

COUNTY	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
ARIZONA	7.5	7.7	6.7	6.8	7.9	7.9	8.5	7.1	7.0	7.6
Apache	1.1	1.1	1.4	0.9	1.6	0.9	1.3	1.1	2.0	2.1
Cochise	6.5	6.4	5.2	4.9	8.4	8.8	9.5	7.5	9.0	8.6
Coconino	5.8	6.1	6.1	5.6	5.6	5.8	5.5	6.1	5.1	5.3
Gila	7.5	8.0	7.6	5.5	7.7	9.7	8.5	6.5	5.6	6.8
Graham	7.9	6.4	5.0	6.0	7.0	9.5	8.1	6.5	6.0	7.5
Greenlee	5.3	5.9	4.5	5.1	6.3	7.1	6.6	4.9	5.8	4.3
Maricopa	8.3	8.7	7.3	7.3	8.4	8.1	8.9	7.3	7.3	8.1
Mohave	4.9	4.8	6.0	7.0	8.4	9.1	10.8	8.0	8.8	9.0
Navajo	2.9	2.7	3.3	3.4	3.1	3.9	3.8	3.2	3.2	3.7
Pima	7.7	8.5	6.8	7.7	8.3	8.6	8.5	7.0	7.1	7.4
Pinal	6.5	4.6	6.5	4.8	6.2	6.1	5.3	4.9	5.8	7.0
Santa Cruz	3.0	3.7	3.6	3.9	5.3	4.2	5.5	5.3	3.8	5.8
Yavapai	4.8	5.3	5.3	5.6	8.0	7.1	8.5	10.1	7.9	7.6
Yuma	7.8	5.9	7.9	6.5	8.5	11.3	11.7	10.8	9.6	10.0

*Per 1,000 estimated midyear population

highest rate was in Yuma County (10.0). Figure 7.1 shows the ratio of marriages to divorces by county in 1979. In Mohave County, the number of divorces actually exceeded the number of marriages. The ratio of divorces to marriages in Mohave County was 1.1 to 1. For the United States, the marriage to divorce ratio was 2 to 1.

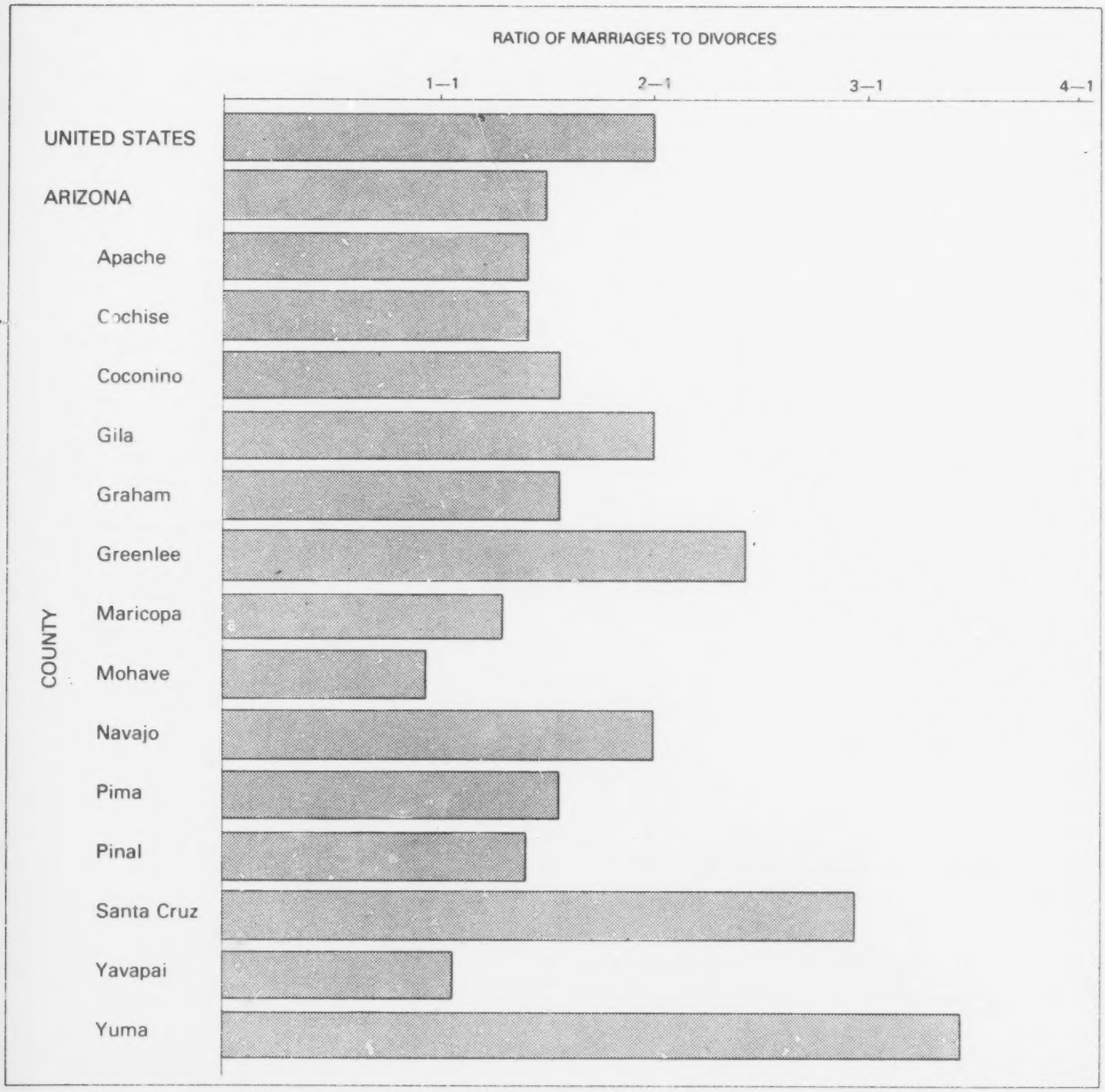


Figure 7.1. Ratio of marriages to divorces by county: Arizona and United States, 1979